

**Technical Support Document
for
Draft Air Emission Permit No. 03900014-102**

This technical support document (TSD) is intended for all parties interested in the draft permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the draft determination to issue the draft permit.

1. General information

1.1 Applicant and stationary source location

Table 1: Applicant and stationary source location

Applicant/Address	Stationary source/Address (SIC Code: 3713 - Truck and Bus Bodies)
McNeilus Truck and Manufacturing Inc 524 E Highway St Dodge Center, Minnesota 55927-9181	McNeilus Truck and Manufacturing Inc 524 E Highway St Dodge Center, MN 55927-9181
Contact: Matthew Gregory Phone: 507-273-6251	

1.2 Facility description

McNeilus Truck & Manufacturing, Inc. (McNeilus) manufactures refuse and recycling trucks (packers) in Dodge Center, Minnesota. Truck cab/chassis assemblies are delivered to the facility. Packers are welded, painted and installed on the cab/chassis. Additional and touch-up painting is completed on the vehicles as required. After final assembly, a functionality test of the installed equipment is performed, and the vehicle is ready for delivery.

Pollutants emitted include particulate matter (PM), particulate matter smaller than 10 microns (PM₁₀), particulate matter smaller than 2.5 microns (PM_{2.5}), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), hazardous air pollutants (HAP), and greenhouse gases (GHG, primarily carbon dioxide).

Painting and cleaning operations create the largest quantity of emissions in the form of VOCs, HAPs, and particulate matter. The painting operations are completed within paint booths which are controlled by panel filters. Space heaters and emergency generators create emissions from combustion of natural gas. Plasma and laser cutting, welding, and the blast booth are insignificant activities. Plasma and laser cutting operations are conditionally insignificant activities because all emissions are vented inside the building 100% of the time and filtered through an air cleaning system.

The permit contains requirements that limit emissions of VOCs, restricts the gallons of paint and coating used, and requires the use of particulate matter control on painting and coating operations.

1.3 Description of the activities allowed by this permit action

This permit action is Part 70 Reissuance with a minor amendment rolled in.

The permit action authorizes the operation of several units associated with the minor amendment IND20220008. The units were constructed and operated as allowed in Minn. R. 7007.1450, subp. 7(A). The

Minnesota Pollution Control Agency (MPCA) has a combined operating and construction permitting program under Minn. R. ch. 7007. Under that authority, this permit action authorizes construction.

Minor amendment IND20220008 is to consolidate plant operations by replacing four production lines with two new production lines. The removed production lines were Parts Paint One, Parts Paint Two, Paint Line One, and Paint Line Two. The two new production lines consist of two topcoat booths, two prime booths, a clearcoat booth, two air make-up units, and two natural gas curing ovens. In addition, the existing blast booth was relocated and the facility added four new natural gas space heaters that qualify as insignificant space heaters.

1.4 Description of notifications and applications included in this action

Table 2: Notifications and applications included in this action

Date received	Application/Notification type and description
03/12/2026 and 07/06/2026	Supplemental Information Part 70 Reissuance (IND20220007)
03/15/2023	Minor Amendment (IND20220008)
07/25/2022	Part 70 Reissuance (IND20220007)

1.5 Facility emissions

The table below shows the Title I emissions summary for the minor amendment. The facility contains a precap on VOC emissions limiting the annual VOC emissions to 237 tpy. The precap limits the material usage from these units, which limits the VOC and particulate emissions. After the precap is taken into account, the Title I emissions change is below the NSR thresholds.

Table 3: Title I emissions summary for minor amendment IND20220008

Pollutant	Unlimited potential emissions from the modification (tpy)	Limited potential emissions from the modification (tpy)	NSR/112(g) threshold for new major source (tpy)	NSR/112(g) review required? (yes/no)
PM	1,355	85	250	No
PM ₁₀	1,353	83	250	No
PM _{2.5}	1,352	82	250	No
NO _x	11.1	11.1	250	No
SO ₂	0.07	0.07	250	No
CO	9.3	9.3	250	No
Ozone (VOC)	3,492	237	250	No
Lead	5.5E-05	5.5E-05	250	No
CO ₂ e*	13,409	13,409	100,000	No

*Carbon dioxide equivalents as defined in Minn. R. 7007.0100.

The table below shows the non-title I emissions summary for the minor amendment. Replacing four production lines with two productions lines resulted in a net reduction of emissions at the facility. The change required a minor amendment since permit requirements needed to be modified.

Table 4: Non-Title I emissions increase summary for minor amendment IND20220008

Pollutant	After change (lb/hr)	Before change (lb/hr)	Net change* (lb/hr)	Insignificant modification thresholds (lb/hr <)	Minor and moderate amendment thresholds (lb/hr < or ≥)	Type of amendment (minor or moderate)
PM ₁₀	19.0	62.9	-43.83	0.855	3.42	Minor
NO _x	2.54	4.27	-1.74	2.28	9.13	Minor
SO ₂	0.02	0.03	-0.01	2.28	9.13	Minor
CO	2.13	3.59	-1.46	5.70	22.80	Minor
VOC	797	1,075	-278	2.28	9.13	Minor
Lead	1.27E-05	2.14E-05	-8.69E-06	0.025	0.11	Minor

*The term 'Net Change' is not equivalent to 'Net Emissions Increase' as defined at 40 CFR § 52.21(b)(3).

Table 5: Total facility potential to emit summary

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	SO ₂ tpy	NO _x tpy	CO tpy	CO ₂ e tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total facility limited potential emissions	74.8	72.9	71.4	0.39	65.0	55.2	77,940	237	237*	237*
Total facility actual emissions (2024)	3.67	3.62	3.62	0.03	5.20	4.30	6,360	112	**	

*Although there is no explicit HAP limit, HAP's are effectively limited by the Total Facility VOC limit of 237 tpy.

**Not reported in Minnesota emission inventory.

Table 6: Facility classification

Classification	Major	Synthetic minor/area	Minor/Area
New Source Review		X	
Part 70	X		
Part 63	X		

1.6 Changes to permit

The MPCA has a combined operating and construction permitting program under Minnesota Rules Chapter 7007, and under Minn. R. 7007.0800, the MPCA has authority to include additional requirements in an operating permit. Under that authority, the following changes to the permit are made through this permit action:

- The permit has been updated to reflect current MPCA templates and standard citation formatting;
- Completed requirements, expired construction authorizations, and the requirements for equipment that has been removed have been deleted;
- COMG 4 Panel Filters: CAM was removed from this group as it was not applicable. A full description of this determination is located below, in Section 2.5;
- COMG 5: Pre-authorized Equipment: This group and the requirements within were removed from the permit because the construction authorization expired;
- COMG 9 Emergency Generators: This group was added to the permit and contains the three emergency natural gas fired generators EQUI 72, 89, and 90. This group was created to reduce duplication in the permit as all three units have identical requirements to one another;

- EQUI 18, 21, and 29: These units were incorrectly identified with the SI type “dryer/oven, unknown firing method”. Because of this, the units were recreated with correct the correct SI type of “dryer/oven, indirect fired” and a new SI number;
 - EQUI 91 Refuse Line Curing Oven (formerly EQUI 18);
 - EQUI 92 Large Parts Curing Oven (formerly EQUI 21);
 - EQUI 93 Lines 3-5 Curing Oven (formerly EQUI 29); and
- Appendix B. Maximum Material Content, Maximum Capacity, and Minimum Transfer Efficiency: The table within this appendix was updated to reflect active units and their maximum application rates, maximum solids content, maximum VOC content, maximum material density, and minimum transfer efficiency.

2. Regulatory and/or statutory basis

2.1 New source review (NSR)

The permit carries forward limits on VOC such that the facility is a minor source under New Source Review regulations. The minor amendment rolled into this permit action authorizes changes at the facility, but does not change the NSR permit status.

2.2 Part 70 permit program

The facility is a major source under the Part 70 permit program.

2.3 New source performance standards (NSPS)

The Permittee has stated that New Source Performance Standards apply to the operations at this facility.

EQUI 72, 89, and 90 are emergency natural gas fired generators that are subject to 40 CFR pt. 60, subp. JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*. The standard sets emission limits for NO_x, CO, and VOC.

2.4 National emission standards for hazardous air pollutants (NESHAP)

The facility is an existing major source of HAPs under the Part 63 permit program.

EQUI 72, 89, and 90 are emergency natural gas fired generators that are subject to 40 CFR pt. 63, subp. ZZZZ, *NESHAP for Stationary Reciprocating Internal Combustion Engines*. Under 40 CFR § 63.6590(c), the emergency engines are required to meet the requirements of 40 CFR pt. 63, subp. ZZZZ by meeting the requirements of 40 CFR pt. 60, subp. JJJJ.

The units in COMG 7, which consist of paint booths, prime booths, touch-up booths, curing ovens, and plant wide clean up solvent usage, are subject to 40 CFR pt. 63, subp. MMMM, *NESHAP for Surface Coating of Miscellaneous Metal Parts and Products*. The surface coating of miscellaneous metal parts or products at the facility falls into the general use coating subcategory, which includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.

COMG 7 is no longer subject to 40 CFR pt. 63, subp. PPPP, *NESHAP for Surface Costing of Plastic Parts and Products* because the facility no longer conducts surface coating of plastic parts and products. The permittee will re-evaluate future 40 CFR pt. 63, subp. PPPP operations and compliance options at the facility, as described under 40 CFR § 63.3881(e)(2) and 40 CFR § 63.4481(e)(2).

2.5 Compliance assurance monitoring (CAM)

This permit action reviewed the CAM requirements at the panel filters in COMG 4 and determined that they do not apply, so removed them from the permit.

Requirements to ensure proper operation of the control equipment were added to the permit to replace the removed CAM requirements. This includes requirements to operate the panel filters whenever the emission units are in operation, daily inspections to ensure proper operation of the panel filters and that they are operating within the appropriate pressure drop range, completing corrective actions if issues are found, and completing regular maintenance on the panel filters. These are the same strategies as used when determining appropriate requirements for a CAM plan. Since the facility has shown continuous compliance with the requirements in the previous CAM plans, the permit was set to contain the same operating checks, parameters, and maintenance schedule.

Permit wise, CAM was removed from the facility and replaced with Minnesota standards. Functionally, the requirements at the panel filters in COMG 1 are the same as previously permitted, just with different citations.

2.6 Regulatory Overview

Table 7: Regulatory overview of facility

Subject item*	Applicable regulations	Rationale
COMG 1 - Air Component Group (Coating Application)	Title I Condition: Avoid major source under 40 CFR § 52.21(b)(1)(i)	Prevention of Significant Deterioration (PSD). Members in COMG 1 are required to vent emissions to control equipment (COMG 4) to limit PM, PM ₁₀ , and PM _{2.5} to avoid major source classification under PSD. EQUI 17, 80, 82, and 84 vent to panel filters in series. Limits reflect that the units have total enclosures.
COMG 1 - Air Component Group (Coating Application)	Minn. R. 7007.0715	Members of COMG 1 are subject to Standards of Performance for post-1969 Industrial Process Equipment. Equipment for which there is no other promulgated performance standard is subject to the opacity and PM limits in this rule. Construction of the unit was on or after July 9, 1969.
COMG 2 - Air Component Group (New Indirect Heating Equipment as defined by Minn. R. 7011.0515, subp.3)	Minn. R. 7011.0515	Members of COMG 2 are subject to Standards of Performance for New Indirect Heating Equipment. • construction of the units was on or after January 31, 1977; • the unit burns gaseous fuels; • the facility is located outside the cities in Table II of the rule; • the unit capacity is less than or equal to 250 MMBtu/hr; and • the facility has less than or equal to 250 MMBtu/hr of indirect heating equipment.

Subject item*	Applicable regulations	Rationale
COMG 3 - Air Component Group (Coating, Curing and Clean-up Operations)	Title I Condition: Avoid major modification under 40 CFR § 52.21(b)(2) and Title I Condition: Avoid major source under 40 CFR § 52.21(b)(1)(i)	Prevention of Significant Deterioration (PSD). Members of COMG 3 are subject to limits taken to avoid major source and modification classification under PSD for all VOC emitting sources and for material throughput. It is a 12-month rolling limit due to the variations in operation. The limits apply to all existing, new, or modified VOC-emitting equipment at the facility. VOC limits and material throughput limits combined with PM, PM₁₀, and PM_{2.5} control requirements limit the source to less than the PSD major source and modification thresholds for VOC, PM, PM₁₀, and PM_{2.5}. Compliance with the VOC limit restricts available gallons of coatings used. Without this limit, PM, PM₁₀, and PM_{2.5} PTE exceed PSD thresholds. Therefore, a limit on material usage (gallons of coating per year) is needed to avoid major modification classification under PSD program and to maintain the emissions from the facility below the major source threshold for PM, PM₁₀, and PM_{2.5}.
COMG 4 - Air Component Group (Panel Filters)	Title I Condition: Avoid major source under 40 CFR § 52.21(b)(2).	Prevention of Significant Deterioration (PSD). Members of COMG 4 are panel filters that are required to be operated and maintained whenever emissions are vented to them. Control efficiency and other operating parameter requirements to limit PM, PM₁₀, and PM_{2.5} PTE to avoid major source and modification classification under PSD. EQUI 17, 80, 82, and 84 vent to panel filters in series. Limits reflect that the units have total enclosures.
COMG 7 - Air Component Group (Coating Operations as defined by 40 CFR pt. 63 subp. Mmmm)	40 CFR 63, subp. Mmmm and Minn. R. 7011.8090; 40 CFR 63, subp. Pppp and Minn. R. 7011.8130	Members of COMG 7 are subject to NESHAP subpart Mmmm for Miscellaneous Coating of Metal Parts and Products, existing source. The Permittee complies by following the emission rate without controls option. Applicable requirements from the standards were determined based on the following information: • The facility is a major source of HAPs; • The facility uses 250 or more gallons per year of coatings that contain HAPs in the surface coating of miscellaneous metal parts; • Construction of COMG 7 components commenced before August 13, 2002; and • Surface coating operations fit the definition of the general use coating subcategory. NESHAP subpart Pppp for Surface Coating of Plastic Parts and Products: Surface coating of plastic parts and products previously occurred but no longer occurs at the facility. Compliance will be re-evaluated if these coating operations occur in the future.

Subject item*	Applicable regulations	Rationale
COMG 8 - Air Component Group (Existing Indirect Heating Equipment as defined by Minn. R. 7011.0510, subp.3)	Minn. R. 7011.0510	Members of COMG 8 are subject to Standards of Performance for Existing Indirect Heating Equipment. Determination of applicable limit from rule: • the units were constructed before January 31, 1977; • the units burn gaseous fuels; • the facility is located outside the cities in Table I of the rule; • the unit capacity is less than or equal to 250 MMBtu/hr; and • the facility has less than or equal to 250 MMBtu/hr of indirect heating equipment.
COMG 9 - Air Component Group (Emergency Generators)	Minn. R. 7011.2300	Members of COMG 9 are stationary internal combustion engines and are limited to natural gas only, by design.
COMG 9 - Air Component Group (Emergency Generators)	40 CFR pt. 60, subp. JJJJ and Minn. R. 7011.2310	Members of COMG 9 are subject to NSPS for Stationary Spark Ignition Internal Combustion Engines. Applicability criteria include: • Engines manufactured on or after January 1, 2009 and constructed after June 12, 2006; • Certified engines; and • Emergency, natural gas engine with maximum engine power greater than or equal to 130 hp and less than 500 hp.
COMG 9 - Air Component Group (Emergency Generators)	40 CFR pt. 63, subp. ZZZZ and Minn. R. 7011.8150	Members of COMG 9 are subject to NESHAP for Stationary Reciprocating Internal Combustion Engines. Members in COMG 9 are a new affected sources subject to 40 CFR pt. 63, subp. ZZZZ. Under 40 CFR § 63.6590(c) the engine complies with the requirements 40 CFR pt. 63, subp. ZZZZ by complying with the requirements of 40 CFR pt. 60, subp. JJJJ and no further requirements apply under 40 CFR pt. 63, subp. ZZZZ.
EQUI 70 (Monorail Small Parts Booth)	Minn. R. 7007.0715	Standards of Performance for post-1969 Industrial Process Equipment. Equipment for which there is no other promulgated performance standard is subject to the opacity and PM limits in this rule. Construction of the unit was on or after July 9, 1969.
EQUI 87 (Monorail Blast Booth)	Minn. R. 7007.0715	Standards of Performance for post-1969 Industrial Process Equipment. Equipment for which there is no other promulgated performance standard is subject to the opacity and PM limits in this rule. Construction of the unit was on or after July 9, 1969.

*Location of the requirement in the permit (e.g., EQUI 1, STRU 2, etc.).

3. Technical information

3.1 Calculations of potential to emit (PTE)

Attachment 1 of this TSD contains detailed spreadsheets and supporting information prepared by the MPCA and McNeilus. The spreadsheet contains a facility wide emissions summary, an emissions increase summary for the minor amendment, emission rates compared to the Industrial Process Equipment Rule, emissions based on the annual VOC limit in COMG 3, key assumptions made regarding the maximum material content as applied, and emission calculations for emission units and insignificant activities.

Emission factors were taken from manufacturer's data and AP-42. Manufacturer information for the coatings used at the spray paint booths is included in Appendix B. Changing to a formulation that deviates from the values in Appendix B is considered a change in method of operation that must be evaluated under

Minn. R. 7007.1200, subp.3, to determine if a permit amendment or notification is required. Evaluate any formulation change if it includes the following:

- formulation has a higher solids or VOC/HAP content,
- formulation increases the capacity (maximum application rate) of an emissions unit (except as preauthorized in the permit), or
- formulation decreases the transfer efficiency.

All air makeup units associated with spray paint booths emit exhaust into the spray paint booth. The exhaust gases pass through the panel filters and flow out the stack. It is assumed that the panel filters do not provide any control of the exhaust gases from the air makeup units.

VOC Precap

The permit contains a 237 tpy VOC limit on all coating, curing, and clean-up operations (COMG 3) at the facility. This limit provides a buffer between the permitted VOC limit and the Prevention of Significant Deterioration (PSD) threshold of 250 tpy. The VOC limit requirements contains PreCap language, allowing the facility the flexibility to retain existing permit language despite the replacement, modification or addition of VOC-emitting equipment. Changes to VOC emitting equipment may still require permit amendments.

Particulate Matter:

Unrestricted PM, PM₁₀, and PM_{2.5} PTE emissions also exceed the PSD major source threshold. However, the VOC precap limit restricts the gallons of coating that can be used at the facility, effectively limiting PM, PM₁₀, and PM_{2.5} emissions. The permit contains a material usage limit which restricts the total gallons of coating used to be less than 338,600 gallons per year. This material usage limit effectively limits PM, PM₁₀, and PM_{2.5}. The permit also contains control efficiency requirements for PM, PM₁₀, and PM_{2.5} which is achieved with the panel filters.

Annual Emission Limits at COMG 3

The previous Title V Reissuance contained a paint usage factor in the emissions calculations which was removed as part of this permit action. The paint usage factor calculated a ratio between VOC and particulate emissions to confirm that by meeting the 237 tpy VOC limit, the particulate emissions were also below PSD thresholds. This was a non-standard and unnecessarily complicated method to verify emissions, so was replaced.

Annual emissions are calculated and summarized for the units in COMG 3 in the PTE spreadsheet. COMG 3 contains all VOC emitting equipment at the facility, which is every unit except for the blast booth EQUI 87. The calculation verifies that emissions remain below permitted thresholds when taking into account the VOC emission limit, the 338,600 gal/yr material throughput limit, and operating the panel filters in the paint booths.

Plant Wide Clean-up Solvent Usage is the solvents used for cleaning throughout the facility. The solvents only contain VOCs and HAPs and are based on actual usage from previous years. The curing ovens, make-up air units, and space heaters are natural gas fired. Emissions are based on natural gas combustion as emissions from coatings are accounted for in the paint booths. The emergency generators are natural gas fired. Emissions are based on natural gas combustion in a reciprocating internal combustion engine.

The paint booths are controlled by panel filters. Coatings used at the facility are always a mixture of two or three components. Primer coatings consist of the primer and a hardener; and topcoat coatings consist of the topcoat, a hardener and a reducer. Emissions are based on the coating component mixture ratios, material/solids content, and transfer efficiencies for particulate matter. VOC material content, solids content, and transfer efficiencies are limited in Appendix B of this permit. In general, VOC and solids content

are inverse of each other. Meaning higher VOC content coatings have lower solids contents. The paint booths are limited by a 338,600 gal/year material throughput limit.

When meeting the 338,600 gal/year material throughput limit, emissions for all pollutants are below PSD thresholds except for VOC and HAPs. The facility tracks and limits VOC emissions on a daily and monthly basis to ensure VOC does not exceed 237 tpy. Since the HAPs at the facility are also VOCs, this ensures HAPs remain below 237 tpy as well. This combination of VOC limit and material throughput limit allows the facility maximum operational flexibility to use whichever coatings and solvents they need while also ensuring all pollutants will remain below permitted thresholds.

3.2 Enforcement Action

On August 9, 2023, the MPCA staff inspected the McNeilus facility as part of a routine inspection. The MPCA sent McNeilus an alleged violation letter on October 19, 2023. Part of that letter alleged that McNeilus failed to obtain an air permit prior to the installation of an emergency generator that was installed on April 1, 2021. A corrective action to submit a plan to ensure that the Regulated Party will obtain an air emission permit or amendment prior to starting construction of equipment or modification to a facility that would require a permit application or amendment was required. McNeilus completed the corrective actions and the enforcement case was wrapped up on February 6, 2024. Letters sent during this enforcement action are in the TSD attachments. The emergency generator was included into the permit as part of this corrective action.

3.3 Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considered the following:

- the likelihood of the facility violating the applicable requirements;
- whether add-on controls are necessary to meet the emission limits;
- the variability of emissions over time;
- the type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- the technical and economic feasibility of possible periodic monitoring methods; and
- the kind of monitoring found on similar units elsewhere.

The Table below summarizes the monitoring requirements.

Table 8: Monitoring

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
COMG 1 (Coating Application)	PM, variable depending on airflow. This limit applies individually to each member of COMG 1. [Minn. R. 7011.0715, subp. 1(A)]	Recordkeeping: Operate units as total enclosures.	The activities are completed within paint booths that are operated as total enclosures venting all emissions to panel filters. The panel filters control

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
	Opacity <= 20 percent opacity. This limit applies individually to each member of COMG 1. [Minn. R. 7011.0715, subp. 1(B)]	Operate control equipment as described in COMG 4. Comply with maximum material usage limit at COMG 3.	particulate emissions. The maximum material throughput limit at COMG 3 effectively limits particulates as well. Maximum material throughputs for each unit and maximum material contents for each coating type are listed in Appendix B. When combining these all together, the PTE is calculated to be less than the particulate matter permit limit and is reasonably expected to be below the opacity limit. The calculations can be found in the PTE calculations in attachment 1.
COMG 2 (New Indirect Heating Equipment as defined by Minn. R. 7011.0515, subp. 3)	Filterable Particulate Matter <= 0.40 pounds per million Btu heat input. This limit applies individually to each member of COMG 2. [Minn. R. 7011.0515, subp. 1]	Recordkeeping: Fuel records	All units use natural gas only, by design; therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that these units will continue to operate such that emissions are well below the emission limits by only burning natural gas. Design based PTE for each unit, using AP-42, is 0.0075 lbs/MMBtu of PM compared to the rule limit of 0.4 lbs/MMBtu of PM.
	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to each member of COMG 2. [Minn. R. 7011.0515, subp. 2]		
COMG 3 (Coating, Curing and Clean-up Operations)	The Permittee must limit emissions of Volatile Organic Compounds <= 237 tons per year 12-month rolling sum. This includes all combustion-source emissions of VOC. All VOC-emitting equipment at the Facility is subject to this limit. [Title I Condition to avoid NSR]	Recordkeeping: Daily records of coating usage. On-going records of coating contents. Monthly calculations of emissions.	Records can be generated on a daily basis with a combination of daily manual logs and purchase records (for smaller quantity items). Material content for each material must be determined as required by the Material Content requirement at COMG 3. Worst case VOC content is listed in Appendix B. Credit can be taken for waste materials collected and shipped off-site (dispensed - waste = emissions). Since this is done at most monthly, calculating emissions more frequently than monthly would result in large spikes (while waste is accumulating) and dips (when waste is shipped) – resulting in possible paperwork violations and days with negative emissions. For these reasons, 12 month rolling limits are reasonable for this facility.

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
COMG 3 (Coating, Curing and Clean-up Operations)	The Permittee must limit Material Usage $\leq$ 338,600 gallons per year 12-month rolling sum. All equipment that uses coatings in COMG 3 is subject to this limit. [Title I Condition to avoid NSR]	Recordkeeping: Daily records of coating usage. Monthly calculations of material usage.	Records are generated on a daily basis to document the total quantity of all coatings and VOC-containing materials used at the facility. Records are based on shipping and delivery records. Since shipping and deliveries are not completed consistently on a daily basis, monthly calculations and a 12-month rolling limit is reasonable for this facility.
COMG 4 (Panel Filters)	Particulate Matter $\geq$ 85 percent control efficiency. PM < 10 micron $\geq$ 85 percent control efficiency. PM < 2.5 micron $\geq$ 85 percent control efficiency. Pressure Drop $\geq$ 0.01 and $\leq$ 5.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3. These limits apply individually to each member of COMG 4. [Title I Condition to avoid NSR]	Recordkeeping: Daily and periodic inspections, daily pressure drop checks, O&M Plan, corrective actions, and recordkeeping.	Daily visual inspections of the panel filters and daily checks to ensure pressure drop is within range is adequate to ensure the panel filters are operating correctly. Monitoring based on the Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.
COMG 7 (Coating Operations as defined by 40 CFR pt. 63 subp. MMMM)	HAPs - Organic $\leq$ 2.6 pounds per gallon coating solids 12-month rolling average (pounds organic HAPs emitted/gallon of coating solids) used during each 12-month compliance period. [40 CFR § 63.3890(b)(1), 40 CFR § 63.4481(e)(2), Minn. R. 7011.8090, Minn. R. 7011.8130]	Calculations and recordkeeping of materials, material data, coating operations, and deviations	Monitoring required by 40 CFR pt. 63, subp. MMMM is adequate to demonstrate compliance with the requirements of the standard because this standard was promulgated after November 15, 1990, and post-November 15, 1990, NSPS and NESHAPs contain adequate monitoring requirements.
COMG 8 (Existing Indirect Heating Equipment as defined by Minn. R. 7011.0510, subp.3)	Filterable Particulate Matter $\leq$ 0.60 pounds per million Btu heat input. This limit applies individually to each member of COMG 8. [Minn. R. 7011.0510, subp. 1] Opacity $\leq$ 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to each member of COMG 8. [Minn. R. 7011.0510, subp. 2]	Recordkeeping: fuel records	All units use natural gas only, by design; therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that these units will continue to operate such that emissions are well below the emission limits by only burning natural gas. Design based PTE for each unit, using AP-42, is 0.0075 lbs/MMBtu of PM compared to the rule limit of 0.6 lbs/MMBtu of PM.
COMG 9 (Emergency Generators)	Opacity $\leq$ 20 percent opacity once operating temperatures have been attained. [Minn. R. 7011.2300, subp. 1]	Monthly recordkeeping of the type of fuel used.	This unit uses pipeline natural gas only; therefore, the likelihood of violating either of the limits is very small.

Subject Item*	Requirement (basis)	What is the monitoring?	Why is this monitoring adequate?
	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. [Minn. R. 7011.2300, subp. 2(B)]		The Permittee can demonstrate that the unit will continue to operate such that emissions meet the emission limits by only burning natural gas. PTE is 0.00059 lb of SO ₂ /MMBtu.
COMG 9 (Emergency Generators)	Nitrogen Oxides <= 2.0 grams per horsepower-hour. Carbon Monoxide <= 4.0 grams per horsepower-hour. Volatile Organic Compounds <= 1.0 grams per horsepower-hour. [40 CFR § 60.4233(e), 40 CFR § 63.6590(c), 40 CFR pt. 60, subp. JJJ (Table 1), Minn. R. 7011.2310, Minn. R. 7011.8150]	Purchase of a certified engine, operation according to the manufacturer's emissions-related instructions, and records of maintenance	Monitoring required by the NSPS is adequate to demonstrate compliance with the requirements because this standard was promulgated after November 15, 1990, and post-November 15, 1990, NSPS and NESHAPs contain adequate monitoring requirements.
EQUI 70 (Monorail Small Parts Booth)	PM, variable depending on airflow. [Minn. R. 7011.0715, subp. 1(A)] Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]	NA	The calculated PM limit is 11.33 lb/hr and the unit has a PTE of 8.80 lb/hr. The applicable rule limit is based on a stack air flow rate of 18,000 acfm. Operations are reasonably expected to be below the opacity limit.
EQUI 87 (Monorail Blast Booth)	PM, variable depending on airflow. [Minn. R. 7011.0715, subp. 1(A)] Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]	NA	The activities are completed within booths that are operated as total enclosures venting all emissions back indoors. The calculated PM limit is 0.092 gr/dscf and the unit has a PTE of 0.011 gr/dscf. The applicable rule limit is based on a stack air flow rate of 9000 acfm. Operations are reasonably expected to be below the opacity limit.

*Location of the requirement in the permit (e.g., EQUI 1, STRU 2, etc.).

3.4 Insignificant activities

McNeilus Truck and Manufacturing Inc has several operations which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix A to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 9: Insignificant Activities

Insignificant activity	General applicable emission limit	Discussion
Space Heaters. Individual units with potential or actual emissions meeting the criteria in Minn. R. 7007.1300, subp. 4(A)-(D)	PM <= 0.4 lb/mmBtu Opacity <= 20% with exceptions. (Minn. R. 7011.0515)	Individual space heaters have potential emissions below the emissions criteria in Minn. R. 7007.1300, subp. 4. Space heaters use natural gas only, by design; therefore, the likelihood of violating either of the emission limits is very small.
Brazing, soldering, torch-cutting, or welding equipment (Minn. R. 7007.1300, subp. 3(E))	PM, variable depending on airflow. Opacity <= 20% (Minn. R. 7011.0715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Natural gas space heaters, paint kitchen booths, vehicle CNG venting, blast booths, plasma cutting, and laser cutting. Individual units with potential emissions less than 2000 lb/year of certain pollutants	Space Heaters: PM <= 0.4 lb/mmBtu Opacity <= 20% with exceptions (Minn. R. 7011.0515) Paint kitchen booths, Vehicle CNG Venting, blast booths, plasma cutting, and laser cutting: PM, variable depending on airflow. Opacity <= 20% (Minn. R. 7011.0715)	Space Heaters: Based on the fuel used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. Paint Kitchen Booths: Based on the amount of paint use to test color mixtures, how often paint color is used, and the maximum material contents of the paint, it is highly unlikely that the emission units could violate the applicable limits. Vehicle CNG Venting: venting compressed natural gas (methane) counts as CO ₂ e emissions. Based on this, it is highly unlikely the unit could violate the applicable limits. Blast Booths, plasma cutting, and laser cutting: based on the particulates emitted from these operations, it is unlikely that either operation will exceed the applicable limits.

As an additional safety precaution, McNeilus vents the compressed natural gas (CNG) from vehicle tanks as part of the manufacturing process. Venting of CNG from vehicle tanks qualifies as an insignificant activity under Minn. R. 7007.1300, subp. 3(F) based on CO₂e PTE. CO₂e is the only regulated pollutant emitted. CO₂e emissions are low, (under 1,000 tpy) even assuming worst case conditions that 100% of the largest CNG tanks (105 diesel gallon equivalents) are 100% methane (~144 scf), one tank is vented each week, and the tanks are completely full.

The combustion type insignificant activities (space heaters) are included in the permit as EQUI 62 for emissions inventory purposes. When these insignificant activities emissions are combined together, the NO_x and CO PTE is significant as shown in the Table below. Units should not be allowed to remain IAs if they are significant sources of emissions for a facility (Minn. R. 7019.3020(A)). However, McNeilus has explained that a single meter tracks all the natural gas usage at the facility, so it is not feasible to track the emissions from the individual space heaters. Therefore, all these units are tracked as a single emissions unit (EQUI 62) for emissions inventory purposes. A list of space heaters is included in Attachment 3 of this TSD.

Table 10: EQUI 62 Potential Emissions

NO_x Emissions (tpy)	CO Emissions (tpy)	PM Emissions (tpy)	PM₁₀ Emissions (tpy)	PM_{2.5} Emissions (tpy)	SO₂ Emissions (tpy)	VOC Emissions (tpy)	CO₂e Emissions (tpy)
30.5	25.7	2.32	2.32	2.32	0.18	1.68	36,900

Blast booth No. 1, Blast booth No. 2, plasma cutting operations and laser cutting operations are classified as insignificant activities under Minn. R. 7007.1300, subp. 3(F). Based on emission potentials, these units are all expected to remain below Minn. R. 7011.0715 emission limits. Additionally, the operations of these units all occur indoors and are vented through building panel filters. The operation and tracking of these panel filters are not required as part of this air permit for these units.

3.5 Permit organization

In general, the permit meets the MPCA Tempo Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Tempo guidance is in the use of groups where the requirements in the group apply to the members of the group individually.

- COMG 4 is a group for the panel filters that contain individual pressure drop ranges and daily monitoring on each panel filter. Since the pressure drop range and daily tracking is identical for each panel filter, and no performance testing is required for the units, these units were placed together into a group; and
- COMG 9 is a group for the emergency generators that contains individual emission limits, hours of operation limits, and usage recordkeeping. Since the limits and recordkeeping are all identical to each other, and the units do not contain performance testing requirements, the units were placed together in a group.

The units were placed in a group to shorten the permit. The units have matching limits, operating parameters, daily monitoring and recordkeeping, and no performance testing, thereby reducing the likelihood that there will be further unit-specific requirements later.

EQUI 62 is a deviation from MPCA Tempo Guidance because the Subject Item represents all of the space heaters in TSD Attachment 3. The space heaters are insignificant activities but are included in the permit under EQUI 62 for emissions inventory purposes. Because the natural gas usage at the facility is tracked using a single meter, the space heaters fuel usage cannot be accounted for on an individual basis, so the emissions are combined together.

3.6 Comments received

The following section will be updated as needed after the public notice period.

Public Notice Period: [start date] – [end date]

EPA Review Period: [start date] – [end date]

4. Permit fee assessment

The permit action is a reissuance of an individual Part 70 permit with a minor amendment rolled in. No application fees apply under Minn. R. 7002.0016, subp. 1 to the changes that are covered by the reissuance application. However, fees do apply to the rolled in minor amendment. The changes associated with the minor amendment were reviewed for a fee assessment.

- The minor amendment adds new units to an existing group with NESHAP subpart M requirements. Because it is already in the permit, additional points are not charged for this federal standard.
- The minor amendment adds new units under existing limits to avoid PSD and therefore additional points are not charged.

5. Conclusion

Based on the information provided by McNeilus Truck and Manufacturing Inc the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 03900014-102 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff members on permit team: Andrew Lubberda (permit engineer)
Peggy Bartz (peer reviewer)
Beckie Olson (data coordinator and permit writing assistant)
Kayla Park (compliance team member)
Ryan Decker (administrative support)

Tempo Activities: Minor Amendment (IND20220008), Part 70 Reissuance (IND20220007)

Attachments: 1. PTE Summary and Emissions Increase Calculation Spreadsheets
2. Subject Item Inventory and Facility Requirements
3. Insignificant Activities Space Heaters Summary
4. Enforcement Action Documents

McNeilus Truck and Manufacturing Inc.
Permit Action No. 03900014-102
Technical Support Document

Attachment 1

PTE Summary and Emissions Increase Calculation Spreadsheets

McNeilus Truck and Manufacturing, Inc.
Potential Emission Summary

Pollutant	EQUI1			EQUI2			
	EQUI1 - Refuse Line Paint Booth			EQUI 2 - Line 6 Paint and Touch-Up Booth			EQUI 4 - High
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)
Nitrogen Oxides (NO _x)							
Carbon Monoxide (CO)							
Particulate Matter (PM)	6.60E+00	1.93E+02	COMG 003	6.60E+00	1.93E+02	COMG 003	1.24E+00
Particulate Matter<10 Microns (PM ₁₀)	6.60E+00	1.93E+02	COMG 003	6.60E+00	1.93E+02	COMG 003	1.24E+00
Particulate Matter<2.5 Microns (PM _{2.5})	6.60E+00	1.93E+02	COMG 003	6.60E+00	1.93E+02	COMG 003	1.24E+00
Volatile Organic Compounds (VOC)	1.14E+02	4.99E+02	COMG 003	1.14E+02	4.99E+02	COMG 003	2.13E+01
Sulfur Dioxide (SO ₂)							
Carbon Dioxide (CO ₂)							
Nitrous Oxide (N ₂ O)							
Methane (CH4)							
Carbon Dioxide Equivalent (CO ₂ e)							
Hazardous Air Pollutants							
Lead							
Polycyclic Organic Matter (POM)							
Benzene							
Cumene	5.00E-01	2.19E+00	COMG 003	5.00E-01	2.19E+00	COMG 003	9.36E-02
Dichlorobenzene							
Ethylbenzene	1.29E+00	5.66E+00	COMG 003	1.29E+00	5.66E+00	COMG 003	2.42E-01
Formaldehyde	4.28E-02	1.88E-01	COMG 003	4.28E-02	1.88E-01	COMG 003	8.02E-03
Glycol Ethers	2.77E+01	1.21E+02	COMG 003	2.77E+01	1.21E+02	COMG 003	5.19E+00
Hexamethylene-1,6-diisocyanate	1.01E-01	4.44E-01	COMG 003	1.01E-01	4.44E-01	COMG 003	1.90E-02
Hexane							
Methanol	8.56E-02	3.75E-01	COMG 003	8.56E-02	3.75E-01	COMG 003	1.60E-02
Methyl Isobutyl Ketone	9.96E+00	4.36E+01	COMG 003	9.96E+00	4.36E+01	COMG 003	1.87E+00
Naphthalene							
Toluene	1.23E-01	5.41E-01	COMG 003	1.23E-01	5.41E-01	COMG 003	2.31E-02
Xylene	5.65E+00	2.48E+01	COMG 003	5.65E+00	2.48E+01	COMG 003	1.06E+00
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,3-Butadiene							
1,3-Dichloropropene							
Acetaldehyde							
Acrolein							
Carbon Tetrachloride							
Chlorobenzene							
Chloroform							
Ethylene Dibromide							
Methylene Chloride							
Styrene							
Vinyl Chloride							
Arsenic							
Beryllium							
Cadmium							
Chromium							
Cobalt							
Manganese							
Mercury							
Nickel							
Selenium							
Total HAPs	4.55E+01	1.99E+02	COMG 003	4.55E+01	1.99E+02	COMG 003	8.52E+00

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI4		EQUI11			EQUI14	
	Flow Line Paint & Prime Booth		EQUI 11: Plant Wide Clean-Up Solvent Usage			EQUI 14 - Line 4 Paint	
Criteria Air Pollutants & HAPs	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)							
Carbon Monoxide (CO)							
Particulate Matter (PM)	3.61E+01	COMG 003				8.80E+00	2.57E+02
Particulate Matter<10 Microns (PM ₁₀)	3.61E+01	COMG 003				8.80E+00	2.57E+02
Particulate Matter<2.5 Microns (PM _{2.5})	3.61E+01	COMG 003				8.80E+00	2.57E+02
Volatile Organic Compounds (VOC)	9.33E+01	COMG 003	5.06E+01	2.21E+02	COMG 003	1.52E+02	6.65E+02
Sulfur Dioxide (SO ₂)							
Carbon Dioxide (CO ₂)							
Nitrous Oxide (N ₂ O)							
Methane (CH ₄)							
Carbon Dioxide Equivalent (CO ₂ e)							
Hazardous Air Pollutants							
Lead							
Polycyclic Organic Matter (POM)							
Benzene							
Cumene	4.10E-01	COMG 003				6.67E-01	2.92E+00
Dichlorobenzene							
Ethylbenzene	1.06E+00	COMG 003				1.72E+00	7.54E+00
Formaldehyde	3.51E-02	COMG 003				5.71E-02	2.50E-01
Glycol Ethers	2.27E+01	COMG 003				3.70E+01	1.62E+02
Hexamethylene-1,6-diisocyanate	8.31E-02	COMG 003				1.35E-01	5.92E-01
Hexane							
Methanol	7.02E-02	COMG 003	2.91E-01	1.28E+00	COMG 003	1.14E-01	5.00E-01
Methyl Isobutyl Ketone	8.17E+00	COMG 003	2.28E+00	9.97E+00	COMG 003	1.33E+01	5.82E+01
Naphthalene							
Toluene	1.01E-01	COMG 003	2.37E+00	1.04E+01	COMG 003	1.65E-01	7.21E-01
Xylene	4.64E+00	COMG 003	2.02E+00	8.83E+00	COMG 003	7.54E+00	3.30E+01
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,3-Butadiene							
1,3-Dichloropropene							
Acetaldehyde							
Acrolein							
Carbon Tetrachloride							
Chlorobenzene							
Chloroform							
Ethylene Dibromide							
Methylene Chloride							
Styrene							
Vinyl Chloride							
Arsenic							
Beryllium							
Cadmium							
Chromium							
Cobalt							
Manganese							
Mercury							
Nickel							
Selenium							
Total HAPs	3.73E+01	COMG 003	6.95E+00	3.05E+01	COMG 003	6.06E+01	2.66E+02

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI15				EQUI17		
	Booth	EQUI 15 - Line 5 Paint Booth			EQUI 17 - Refuse Line Prime Booth		
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)							
Carbon Monoxide (CO)							
Particulate Matter (PM)	COMG 003	8.80E+00	2.57E+02	COMG 003	1.98E+00	3.86E+02	COMG 003
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	8.80E+00	2.57E+02	COMG 003	1.98E+00	3.86E+02	COMG 003
Particulate Matter<2.5 Microns (PM _{2.5})	COMG 003	8.80E+00	2.57E+02	COMG 003	1.98E+00	3.86E+02	COMG 003
Volatile Organic Compounds (VOC)	COMG 003	1.52E+02	6.65E+02	COMG 003	2.28E+02	9.97E+02	COMG 003
Sulfur Dioxide (SO ₂)							
Carbon Dioxide (CO ₂)							
Nitrous Oxide (N ₂ O)							
Methane (CH ₄)							
Carbon Dioxide Equivalent (CO ₂ e)							
Hazardous Air Pollutants							
Lead							
Polycyclic Organic Matter (POM)							
Benzene							
Cumene	COMG 003	6.67E-01	2.92E+00	COMG 003	1.00E+00	4.38E+00	COMG 003
Dichlorobenzene							
Ethylbenzene	COMG 003	1.72E+00	7.54E+00	COMG 003	2.58E+00	1.13E+01	COMG 003
Formaldehyde	COMG 003	5.71E-02	2.50E-01	COMG 003	8.56E-02	3.75E-01	COMG 003
Glycol Ethers	COMG 003	3.70E+01	1.62E+02	COMG 003	5.54E+01	2.43E+02	COMG 003
Hexamethylene-1,6-diisocyanate	COMG 003	1.35E-01	5.92E-01	COMG 003	2.03E-01	8.88E-01	COMG 003
Hexane							
Methanol	COMG 003	1.14E-01	5.00E-01	COMG 003	1.71E-01	7.50E-01	COMG 003
Methyl Isobutyl Ketone	COMG 003	1.33E+01	5.82E+01	COMG 003	1.99E+01	8.73E+01	COMG 003
Naphthalene							
Toluene	COMG 003	1.65E-01	7.21E-01	COMG 003	2.47E-01	1.08E+00	COMG 003
Xylene	COMG 003	7.54E+00	3.30E+01	COMG 003	1.13E+01	4.95E+01	COMG 003
1,1,2,2-Tetrachloroethane							
1,1,2-Trichloroethane							
1,3-Butadiene							
1,3-Dichloropropene							
Acetaldehyde							
Acrolein							
Carbon Tetrachloride							
Chlorobenzene							
Chloroform							
Ethylene Dibromide							
Methylene Chloride							
Styrene							
Vinyl Chloride							
Arsenic							
Beryllium							
Cadmium							
Chromium							
Cobalt							
Manganese							
Mercury							
Nickel							
Selenium							
Total HAPs	COMG 003	6.06E+01	2.66E+02	COMG 003	9.10E+01	3.98E+02	COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI26			EQUI28			EQUI32	
	EQUI 26 - Large Parts Prime & Paint			EQUI 28 - Line 3 Paint Booth			EQUI 32: Large Parts Prime & Paint Air Make-Up	
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)							2.18E-01	9.55E-01
Carbon Monoxide (CO)							1.83E-01	8.03E-01
Particulate Matter (PM)	6.60E+00	1.93E+02	COMG 003	8.80E+00	2.57E+02	COMG 003	1.66E-02	7.26E-02
Particulate Matter<10 Microns (PM ₁₀)	6.60E+00	1.93E+02	COMG 003	8.80E+00	2.57E+02	COMG 003	1.66E-02	7.26E-02
Particulate Matter<2.5 Microns (PM _{2.5})	6.60E+00	1.93E+02	COMG 003	8.80E+00	2.57E+02	COMG 003	1.66E-02	7.26E-02
Volatile Organic Compounds (VOC)	1.14E+02	4.99E+02	COMG 003	1.52E+02	6.65E+02	COMG 003	1.20E-02	5.25E-02
Sulfur Dioxide (SO ₂)							1.31E-03	5.73E-03
Carbon Dioxide (CO ₂)							2.62E+02	1.15E+03
Nitrous Oxide (N ₂ O)							4.80E-03	2.10E-02
Methane (CH ₄)							5.02E-03	2.20E-02
Carbon Dioxide Equivalent (CO ₂ e)							2.63E+02	1.15E+03
Hazardous Air Pollutants								
Lead							1.09E-06	4.78E-06
Polycyclic Organic Matter (POM)							1.92E-07	8.43E-07
Benzene							4.58E-06	2.01E-05
Cumene	5.00E-01	2.19E+00	COMG 003	6.67E-01	2.92E+00	COMG 003		
Dichlorobenzene							2.62E-06	1.15E-05
Ethylbenzene	1.29E+00	5.66E+00	COMG 003	1.72E+00	7.54E+00	COMG 003		
Formaldehyde	4.28E-02	1.88E-01	COMG 003	5.71E-02	2.50E-01	COMG 003	1.64E-04	7.17E-04
Glycol Ethers	2.77E+01	1.21E+02	COMG 003	3.70E+01	1.62E+02	COMG 003		
Hexamethylene-1,6-diisocyanate	1.01E-01	4.44E-01	COMG 003	1.35E-01	5.92E-01	COMG 003		
Hexane							3.93E-03	1.72E-02
Methanol	8.56E-02	3.75E-01	COMG 003	1.14E-01	5.00E-01	COMG 003		
Methyl Isobutyl Ketone	9.96E+00	4.36E+01	COMG 003	1.33E+01	5.82E+01	COMG 003		
Naphthalene							1.33E-06	5.83E-06
Toluene	1.23E-01	5.41E-01	COMG 003	1.65E-01	7.21E-01	COMG 003	7.42E-06	3.25E-05
Xylene	5.65E+00	2.48E+01	COMG 003	7.54E+00	3.30E+01	COMG 003		
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic							4.36E-07	1.91E-06
Beryllium							2.62E-08	1.15E-07
Cadmium							2.40E-06	1.05E-05
Chromium							3.05E-06	1.34E-05
Cobalt							1.83E-07	8.03E-07
Manganese							8.29E-07	3.63E-06
Mercury							5.67E-07	2.48E-06
Nickel							4.58E-06	2.01E-05
Selenium							5.24E-08	2.29E-07
Total HAPs	4.55E+01	1.99E+02	COMG 003	6.06E+01	2.66E+02	COMG 003	4.12E-03	1.80E-02

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant		EQUI33			EQUI36			
	ink and Paint	EQUI 33: Refuse Line Prime Booth Air Make-Up			EQUI 36: High Flow Line Air Make-Up			EQUI 37
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)
Nitrogen Oxides (NO _x)	COMG 003	4.58E-01	2.01E+00	COMG 003	4.58E-01	2.01E+00	COMG 003	
Carbon Monoxide (CO)	COMG 003	3.85E-01	1.69E+00	COMG 003	3.85E-01	1.69E+00	COMG 003	
Particulate Matter (PM)	COMG 003	3.48E-02	1.53E-01	COMG 003	3.48E-02	1.53E-01	COMG 003	8.80E+00
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	3.48E-02	1.53E-01	COMG 003	3.48E-02	1.53E-01	COMG 003	8.80E+00
Particulate Matter<2.5 Microns (PM ₂)	COMG 003	3.48E-02	1.53E-01	COMG 003	3.48E-02	1.53E-01	COMG 003	8.80E+00
Volatile Organic Compounds (VOC)	COMG 003	2.52E-02	1.10E-01	COMG 003	2.52E-02	1.10E-01	COMG 003	1.52E+02
Sulfur Dioxide (SO ₂)	COMG 003	2.75E-03	1.20E-02	COMG 003	2.75E-03	1.20E-02	COMG 003	
Carbon Dioxide (CO ₂)	COMG 003	5.50E+02	2.41E+03	COMG 003	5.50E+02	2.41E+03	COMG 003	
Nitrous Oxide (N ₂ O)	COMG 003	1.01E-02	4.42E-02	COMG 003	1.01E-02	4.42E-02	COMG 003	
Methane (CH4)	COMG 003	1.05E-02	4.62E-02	COMG 003	1.05E-02	4.62E-02	COMG 003	
Carbon Dioxide Equivalent (CO ₂ e)	COMG 003	5.53E+02	2.42E+03	COMG 003	5.53E+02	2.42E+03	COMG 003	
Hazardous Air Pollutants								
Lead	COMG 003	2.29E-06	1.00E-05	COMG 003	2.29E-06	1.00E-05	COMG 003	
Polycyclic Organic Matter (POM)	COMG 003	4.04E-07	1.77E-06	COMG 003	4.04E-07	1.77E-06	COMG 003	
Benzene	COMG 003	9.63E-06	4.22E-05	COMG 003	9.63E-06	4.22E-05	COMG 003	
Cumene								6.67E-01
Dichlorobenzene	COMG 003	5.50E-06	2.41E-05	COMG 003	5.50E-06	2.41E-05	COMG 003	
Ethylbenzene								1.72E+00
Formaldehyde	COMG 003	3.44E-04	1.51E-03	COMG 003	3.44E-04	1.51E-03	COMG 003	5.71E-02
Glycol Ethers								3.70E+01
Hexamethylene-1,6-diisocyanate								1.35E-01
Hexane	COMG 003	8.25E-03	3.61E-02	COMG 003	8.25E-03	3.61E-02	COMG 003	
Methanol								1.14E-01
Methyl Isobutyl Ketone								1.33E+01
Naphthalene	COMG 003	2.80E-06	1.22E-05	COMG 003	2.80E-06	1.22E-05	COMG 003	
Toluene	COMG 003	1.56E-05	6.83E-05	COMG 003	1.56E-05	6.83E-05	COMG 003	1.65E-01
Xylene								7.54E+00
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic	COMG 003	9.17E-07	4.02E-06	COMG 003	9.17E-07	4.02E-06	COMG 003	
Beryllium	COMG 003	5.50E-08	2.41E-07	COMG 003	5.50E-08	2.41E-07	COMG 003	
Cadmium	COMG 003	5.04E-06	2.21E-05	COMG 003	5.04E-06	2.21E-05	COMG 003	
Chromium	COMG 003	6.42E-06	2.81E-05	COMG 003	6.42E-06	2.81E-05	COMG 003	
Cobalt	COMG 003	3.85E-07	1.69E-06	COMG 003	3.85E-07	1.69E-06	COMG 003	
Manganese	COMG 003	1.74E-06	7.63E-06	COMG 003	1.74E-06	7.63E-06	COMG 003	
Mercury	COMG 003	1.19E-06	5.22E-06	COMG 003	1.19E-06	5.22E-06	COMG 003	
Nickel	COMG 003	9.63E-06	4.22E-05	COMG 003	9.63E-06	4.22E-05	COMG 003	
Selenium	COMG 003	1.10E-07	4.82E-07	COMG 003	1.10E-07	4.82E-07	COMG 003	
Total HAPs	COMG 003	8.66E-03	3.79E-02	COMG 003	8.66E-03	3.79E-02	COMG 003	6.06E+01

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI37		EQUI38			EQUI39		
	- Line 3 Touch-Up Booth		EQUI 38 - Line 3 Paint Booth Air Make-Up			EQUI 39 - Line 3 Touch-Up Booth Air Make-Up		
Criteria Air Pollutants & HAPs	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)			1.89E-01	8.26E-01	COMG 003	3.88E-01	1.70E+00	COMG 003
Carbon Monoxide (CO)			1.59E-01	6.94E-01	COMG 003	3.26E-01	1.43E+00	COMG 003
Particulate Matter (PM)	2.57E+02	COMG 003	1.43E-02	6.28E-02	COMG 003	2.95E-02	1.29E-01	COMG 003
Particulate Matter<10 Microns (PM ₁₀)	2.57E+02	COMG 003	1.43E-02	6.28E-02	COMG 003	2.95E-02	1.29E-01	COMG 003
Particulate Matter<2.5 Microns (PM _{2.5})	2.57E+02	COMG 003	1.43E-02	6.28E-02	COMG 003	2.95E-02	1.29E-01	COMG 003
Volatile Organic Compounds (VOC)	6.65E+02	COMG 003	1.04E-02	4.54E-02	COMG 003	2.13E-02	9.35E-02	COMG 003
Sulfur Dioxide (SO ₂)			1.13E-03	4.96E-03	COMG 003	2.33E-03	1.02E-02	COMG 003
Carbon Dioxide (CO ₂)			2.26E+02	9.92E+02	COMG 003	4.66E+02	2.04E+03	COMG 003
Nitrous Oxide (N ₂ O)			4.15E-03	1.82E-02	COMG 003	8.54E-03	3.74E-02	COMG 003
Methane (CH ₄)			4.34E-03	1.90E-02	COMG 003	8.93E-03	3.91E-02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e)			2.28E+02	9.98E+02	COMG 003	4.69E+02	2.05E+03	COMG 003
Hazardous Air Pollutants								
Lead			9.44E-07	4.13E-06	COMG 003	1.94E-06	8.50E-06	COMG 003
Polycyclic Organic Matter (POM)			1.66E-07	7.29E-07	COMG 003	3.42E-07	1.50E-06	COMG 003
Benzene			3.96E-06	1.74E-05	COMG 003	8.15E-06	3.57E-05	COMG 003
Cumene	2.92E+00	COMG 003						
Dichlorobenzene			2.26E-06	9.92E-06	COMG 003	4.66E-06	2.04E-05	COMG 003
Ethylbenzene	7.54E+00	COMG 003						
Formaldehyde	2.50E-01	COMG 003	1.42E-04	6.20E-04	COMG 003	2.91E-04	1.28E-03	COMG 003
Glycol Ethers	1.62E+02	COMG 003						
Hexamethylene-1,6-diisocyanate	5.92E-01	COMG 003						
Hexane			3.40E-03	1.49E-02	COMG 003	6.99E-03	3.06E-02	COMG 003
Methanol	5.00E-01	COMG 003						
Methyl Isobutyl Ketone	5.82E+01	COMG 003						
Naphthalene			1.15E-06	5.04E-06	COMG 003	2.37E-06	1.04E-05	COMG 003
Toluene	7.21E-01	COMG 003	6.42E-06	2.81E-05	COMG 003	1.32E-05	5.78E-05	COMG 003
Xylene	3.30E+01	COMG 003						
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic			3.77E-07	1.65E-06	COMG 003	7.76E-07	3.40E-06	COMG 003
Beryllium			2.26E-08	9.92E-08	COMG 003	4.66E-08	2.04E-07	COMG 003
Cadmium			2.08E-06	9.09E-06	COMG 003	4.27E-06	1.87E-05	COMG 003
Chromium			2.64E-06	1.16E-05	COMG 003	5.44E-06	2.38E-05	COMG 003
Cobalt			1.59E-07	6.94E-07	COMG 003	3.26E-07	1.43E-06	COMG 003
Manganese			7.17E-07	3.14E-06	COMG 003	1.48E-06	6.46E-06	COMG 003
Mercury			4.91E-07	2.15E-06	COMG 003	1.01E-06	4.42E-06	COMG 003
Nickel			3.96E-06	1.74E-05	COMG 003	8.15E-06	3.57E-05	COMG 003
Selenium			4.53E-08	1.98E-07	COMG 003	9.32E-08	4.08E-07	COMG 003
Total HAPs	2.66E+02	COMG 003	3.56E-03	1.56E-02	COMG 003	7.33E-03	3.21E-02	COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI40			EQUI41			EQUI42	
	EQUI 40 - Line 4 Touch-Up Booth			EQUI 41 - Line 4 Paint Booth Air Make-Up			EQUI 42 - Line 4 Touch-Up Make-Up	
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)				1.89E-01	8.26E-01	COMG 003	3.88E-01	1.70E+00
Carbon Monoxide (CO)				1.59E-01	6.94E-01	COMG 003	3.26E-01	1.43E+00
Particulate Matter (PM)	8.80E+00	2.57E+02	COMG 003	1.43E-02	6.28E-02	COMG 003	2.95E-02	1.29E-01
Particulate Matter<10 Microns (PM ₁₀)	8.80E+00	2.57E+02	COMG 003	1.43E-02	6.28E-02	COMG 003	2.95E-02	1.29E-01
Particulate Matter<2.5 Microns (PM _{2.5})	8.80E+00	2.57E+02	COMG 003	1.43E-02	6.28E-02	COMG 003	2.95E-02	1.29E-01
Volatile Organic Compounds (VOC)	1.52E+02	6.65E+02	COMG 003	1.04E-02	4.54E-02	COMG 003	2.13E-02	9.35E-02
Sulfur Dioxide (SO ₂)				1.13E-03	4.96E-03	COMG 003	2.33E-03	1.02E-02
Carbon Dioxide (CO ₂)				2.26E+02	9.92E+02	COMG 003	4.66E+02	2.04E+03
Nitrous Oxide (N ₂ O)				4.15E-03	1.82E-02	COMG 003	8.54E-03	3.74E-02
Methane (CH ₄)				4.34E-03	1.90E-02	COMG 003	8.93E-03	3.91E-02
Carbon Dioxide Equivalent (CO ₂ e)				2.28E+02	9.98E+02	COMG 003	4.69E+02	2.05E+03
Hazardous Air Pollutants								
Lead				9.44E-07	4.13E-06	COMG 003	1.94E-06	8.50E-06
Polycyclic Organic Matter (POM)				1.66E-07	7.29E-07	COMG 003	3.42E-07	1.50E-06
Benzene				3.96E-06	1.74E-05	COMG 003	8.15E-06	3.57E-05
Cumene	6.67E-01	2.92E+00	COMG 003					
Dichlorobenzene				2.26E-06	9.92E-06	COMG 003	4.66E-06	2.04E-05
Ethylbenzene	1.72E+00	7.54E+00	COMG 003					
Formaldehyde	5.71E-02	2.50E-01	COMG 003	1.42E-04	6.20E-04	COMG 003	2.91E-04	1.28E-03
Glycol Ethers	3.70E+01	1.62E+02	COMG 003					
Hexamethylene-1,6-diisocyanate	1.35E-01	5.92E-01	COMG 003					
Hexane				3.40E-03	1.49E-02	COMG 003	6.99E-03	3.06E-02
Methanol	1.14E-01	5.00E-01	COMG 003					
Methyl Isobutyl Ketone	1.33E+01	5.82E+01	COMG 003					
Naphthalene				1.15E-06	5.04E-06	COMG 003	2.37E-06	1.04E-05
Toluene	1.65E-01	7.21E-01	COMG 003	6.42E-06	2.81E-05	COMG 003	1.32E-05	5.78E-05
Xylene	7.54E+00	3.30E+01	COMG 003					
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic				3.77E-07	1.65E-06	COMG 003	7.76E-07	3.40E-06
Beryllium				2.26E-08	9.92E-08	COMG 003	4.66E-08	2.04E-07
Cadmium				2.08E-06	9.09E-06	COMG 003	4.27E-06	1.87E-05
Chromium				2.64E-06	1.16E-05	COMG 003	5.44E-06	2.38E-05
Cobalt				1.59E-07	6.94E-07	COMG 003	3.26E-07	1.43E-06
Manganese				7.17E-07	3.14E-06	COMG 003	1.48E-06	6.46E-06
Mercury				4.91E-07	2.15E-06	COMG 003	1.01E-06	4.42E-06
Nickel				3.96E-06	1.74E-05	COMG 003	8.15E-06	3.57E-05
Selenium				4.53E-08	1.98E-07	COMG 003	9.32E-08	4.08E-07
Total HAPs	6.06E+01	2.66E+02	COMG 003	3.56E-03	1.56E-02	COMG 003	7.33E-03	3.21E-02

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	Paint Booth Air	EQUI43			EQUI44			EQUI 45 - Line 5 Paint Booth Air Make-Up
		EQUI 43 - Line 5 Touch-Up Booth			EQUI 44 - Line 5 Paint Booth Air Make-Up			
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)
Nitrogen Oxides (NO _x)	COMG 003				2.16E-01	9.44E-01	COMG 003	3.88E-01
Carbon Monoxide (CO)	COMG 003				1.81E-01	7.94E-01	COMG 003	3.26E-01
Particulate Matter (PM)	COMG 003	8.80E+00	2.57E+02	COMG 003	1.64E-02	7.18E-02	COMG 003	2.95E-02
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	8.80E+00	2.57E+02	COMG 003	1.64E-02	7.18E-02	COMG 003	2.95E-02
Particulate Matter<2.5 Microns (PM _{2.5})	COMG 003	8.80E+00	2.57E+02	COMG 003	1.64E-02	7.18E-02	COMG 003	2.95E-02
Volatile Organic Compounds (VOC)	COMG 003	1.52E+02	6.65E+02	COMG 003	1.19E-02	5.19E-02	COMG 003	2.13E-02
Sulfur Dioxide (SO ₂)	COMG 003				1.29E-03	5.67E-03	COMG 003	2.33E-03
Carbon Dioxide (CO ₂)	COMG 003				2.59E+02	1.13E+03	COMG 003	4.66E+02
Nitrous Oxide (N ₂ O)	COMG 003				4.75E-03	2.08E-02	COMG 003	8.54E-03
Methane (CH ₄)	COMG 003				4.96E-03	2.17E-02	COMG 003	8.93E-03
Carbon Dioxide Equivalent (CO ₂ e)	COMG 003				2.60E+02	1.14E+03	COMG 003	4.69E+02
Hazardous Air Pollutants								
Lead	COMG 003				1.08E-06	4.72E-06	COMG 003	1.94E-06
Polycyclic Organic Matter (POM)	COMG 003				1.90E-07	8.33E-07	COMG 003	3.42E-07
Benzene	COMG 003				4.53E-06	1.98E-05	COMG 003	8.15E-06
Cumene		6.67E-01	2.92E+00	COMG 003				
Dichlorobenzene	COMG 003				2.59E-06	1.13E-05	COMG 003	4.66E-06
Ethylbenzene		1.72E+00	7.54E+00	COMG 003				
Formaldehyde	COMG 003	5.71E-02	2.50E-01	COMG 003	1.62E-04	7.09E-04	COMG 003	2.91E-04
Glycol Ethers		3.70E+01	1.62E+02	COMG 003				
Hexamethylene-1,6-diisocyanate		1.35E-01	5.92E-01	COMG 003				
Hexane	COMG 003				3.88E-03	1.70E-02	COMG 003	6.99E-03
Methanol		1.14E-01	5.00E-01	COMG 003				
Methyl Isobutyl Ketone		1.33E+01	5.82E+01	COMG 003				
Naphthalene	COMG 003				1.32E-06	5.76E-06	COMG 003	2.37E-06
Toluene	COMG 003	1.65E-01	7.21E-01	COMG 003	7.33E-06	3.21E-05	COMG 003	1.32E-05
Xylene		7.54E+00	3.30E+01	COMG 003				
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic	COMG 003				4.31E-07	1.89E-06	COMG 003	7.76E-07
Beryllium	COMG 003				2.59E-08	1.13E-07	COMG 003	4.66E-08
Cadmium	COMG 003				2.37E-06	1.04E-05	COMG 003	4.27E-06
Chromium	COMG 003				3.02E-06	1.32E-05	COMG 003	5.44E-06
Cobalt	COMG 003				1.81E-07	7.94E-07	COMG 003	3.26E-07
Manganese	COMG 003				8.20E-07	3.59E-06	COMG 003	1.48E-06
Mercury	COMG 003				5.61E-07	2.46E-06	COMG 003	1.01E-06
Nickel	COMG 003				4.53E-06	1.98E-05	COMG 003	8.15E-06
Selenium	COMG 003				5.18E-08	2.27E-07	COMG 003	9.32E-08
Total HAPs	COMG 003	6.06E+01	2.66E+02	COMG 003	4.07E-03	1.78E-02	COMG 003	7.33E-03

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI45		EQUI46			EQUI58		
	Line 5 Touch-Up Booth Air Make-Up		EQUI46 - Line 6 Paint and Touch-Up Booth Air Make-Up			EQUI 58: High Flow Line Oven		
Criteria Air Pollutants & HAPs	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)	1.70E+00	COMG 003	4.27E-01	1.87E+00	COMG 003	1.47E-01	6.44E-01	COMG 003
Carbon Monoxide (CO)	1.43E+00	COMG 003	3.59E-01	1.57E+00	COMG 003	1.24E-01	5.41E-01	COMG 003
Particulate Matter (PM)	1.29E-01	COMG 003	3.25E-02	1.42E-01	COMG 003	1.12E-02	4.89E-02	COMG 003
Particulate Matter<10 Microns (PM ₁₀)	1.29E-01	COMG 003	3.25E-02	1.42E-01	COMG 003	1.12E-02	4.89E-02	COMG 003
Particulate Matter<2.5 Microns (PM _{2.5})	1.29E-01	COMG 003	3.25E-02	1.42E-01	COMG 003	1.12E-02	4.89E-02	COMG 003
Volatile Organic Compounds (VOC)	9.35E-02	COMG 003	2.35E-02	1.03E-01	COMG 003	8.09E-03	3.54E-02	COMG 003
Sulfur Dioxide (SO ₂)	1.02E-02	COMG 003	2.56E-03	1.12E-02	COMG 003	8.82E-04	3.86E-03	COMG 003
Carbon Dioxide (CO ₂)	2.04E+03	COMG 003	5.12E+02	2.24E+03	COMG 003	1.76E+02	7.73E+02	COMG 003
Nitrous Oxide (N ₂ O)	3.74E-02	COMG 003	9.40E-03	4.12E-02	COMG 003	3.24E-03	1.42E-02	COMG 003
Methane (CH ₄)	3.91E-02	COMG 003	9.82E-03	4.30E-02	COMG 003	3.38E-03	1.48E-02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e)	2.05E+03	COMG 003	5.16E+02	2.26E+03	COMG 003	1.78E+02	7.78E+02	COMG 003
Hazardous Air Pollutants								
Lead	8.50E-06	COMG 003	2.14E-06	9.35E-06	COMG 003	7.35E-07	3.22E-06	COMG 003
Polycyclic Organic Matter (POM)	1.50E-06	COMG 003	3.77E-07	1.65E-06	COMG 003	1.30E-07	5.68E-07	COMG 003
Benzene	3.57E-05	COMG 003	8.97E-06	3.93E-05	COMG 003	3.09E-06	1.35E-05	COMG 003
Cumene								
Dichlorobenzene	2.04E-05	COMG 003	5.12E-06	2.24E-05	COMG 003	1.76E-06	7.73E-06	COMG 003
Ethylbenzene								
Formaldehyde	1.28E-03	COMG 003	3.20E-04	1.40E-03	COMG 003	1.10E-04	4.83E-04	COMG 003
Glycol Ethers								
Hexamethylene-1,6-diisocyanate								
Hexane	3.06E-02	COMG 003	7.69E-03	3.37E-02	COMG 003	2.65E-03	1.16E-02	COMG 003
Methanol								
Methyl Isobutyl Ketone								
Naphthalene	1.04E-05	COMG 003	2.61E-06	1.14E-05	COMG 003	8.97E-07	3.93E-06	COMG 003
Toluene	5.78E-05	COMG 003	1.45E-05	6.36E-05	COMG 003	5.00E-06	2.19E-05	COMG 003
Xylene								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic	3.40E-06	COMG 003	8.54E-07	3.74E-06	COMG 003	2.94E-07	1.29E-06	COMG 003
Beryllium	2.04E-07	COMG 003	5.12E-08	2.24E-07	COMG 003	1.76E-08	7.73E-08	COMG 003
Cadmium	1.87E-05	COMG 003	4.70E-06	2.06E-05	COMG 003	1.62E-06	7.09E-06	COMG 003
Chromium	2.38E-05	COMG 003	5.98E-06	2.62E-05	COMG 003	2.06E-06	9.02E-06	COMG 003
Cobalt	1.43E-06	COMG 003	3.59E-07	1.57E-06	COMG 003	1.24E-07	5.41E-07	COMG 003
Manganese	6.46E-06	COMG 003	1.62E-06	7.11E-06	COMG 003	5.59E-07	2.45E-06	COMG 003
Mercury	4.42E-06	COMG 003	1.11E-06	4.86E-06	COMG 003	3.82E-07	1.67E-06	COMG 003
Nickel	3.57E-05	COMG 003	8.97E-06	3.93E-05	COMG 003	3.09E-06	1.35E-05	COMG 003
Selenium	4.08E-07	COMG 003	1.02E-07	4.49E-07	COMG 003	3.53E-08	1.55E-07	COMG 003
Total HAPs	3.21E-02	COMG 003	8.06E-03	3.53E-02	COMG 003	2.78E-03	1.22E-02	COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI59			EQUI62 *Misc. Combustion			EQUI70	
	EQUI 59 - Line 6 Curing Oven			EQUI 62 - Total Facility Space Heaters			EQUI 70 - Monorail Small F	
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)	6.96E-01	3.05E+00	COMG 003	6.97E+00	3.05E+01	COMG 003		
Carbon Monoxide (CO)	5.85E-01	2.56E+00	COMG 003	5.86E+00	2.56E+01	COMG 003		
Particulate Matter (PM)	5.29E-02	2.32E-01	COMG 003	5.30E-01	2.32E+00	COMG 003	1.96E-01	8.57E-01
Particulate Matter<10 Microns (PM ₁₀)	5.29E-02	2.32E-01	COMG 003	5.30E-01	2.32E+00	COMG 003	1.96E-01	8.57E-01
Particulate Matter<2.5 Microns (PM _{2.5})	5.29E-02	2.32E-01	COMG 003	5.30E-01	2.32E+00	COMG 003	1.96E-01	8.57E-01
Volatile Organic Compounds (VOC)	3.83E-02	1.68E-01	COMG 003	3.83E-01	1.68E+00	COMG 003	5.06E-01	2.22E+00
Sulfur Dioxide (SO ₂)	4.17E-03	1.83E-02	COMG 003	4.18E-02	1.83E-01	COMG 003		
Carbon Dioxide (CO ₂)	8.35E+02	3.66E+03	COMG 003	8.36E+03	3.66E+04	COMG 003		
Nitrous Oxide (N ₂ O)	1.53E-02	6.71E-02	COMG 003	1.53E-01	6.72E-01	COMG 003		
Methane (CH ₄)	1.60E-02	7.01E-02	COMG 003	1.60E-01	7.02E-01	COMG 003		
Carbon Dioxide Equivalent (CO ₂ e)	8.40E+02	3.68E+03	COMG 003	8.41E+03	3.69E+04	COMG 003		
Hazardous Air Pollutants								
Lead	3.48E-06	1.52E-05	COMG 003	3.49E-05	1.53E-04	COMG 003		
Polycyclic Organic Matter (POM)	6.14E-07	2.69E-06	COMG 003	6.15E-06	2.69E-05	COMG 003		
Benzene	1.46E-05	6.40E-05	COMG 003	1.46E-04	6.41E-04	COMG 003		
Cumene							2.22E-03	9.73E-03
Dichlorobenzene	8.35E-06	3.66E-05	COMG 003	8.36E-05	3.66E-04	COMG 003		
Ethylbenzene							5.74E-03	2.51E-02
Formaldehyde	5.22E-04	2.29E-03	COMG 003	5.23E-03	2.29E-02	COMG 003	1.90E-04	8.34E-04
Glycol Ethers							1.23E-01	5.40E-01
Hexamethylene-1,6-diisocyanate							4.50E-04	1.97E-03
Hexane	1.25E-02	5.49E-02	COMG 003	1.25E-01	5.50E-01	COMG 003		
Methanol							3.81E-04	1.67E-03
Methyl Isobutyl Ketone							4.43E-02	1.94E-01
Naphthalene	4.25E-06	1.86E-05	COMG 003	4.25E-05	1.86E-04	COMG 003		
Toluene	2.37E-05	1.04E-04	COMG 003	2.37E-04	1.04E-03	COMG 003	5.49E-04	2.40E-03
Xylene							2.51E-02	1.10E-01
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic	1.39E-06	6.10E-06	COMG 003	1.39E-05	6.11E-05	COMG 003		
Beryllium	8.35E-08	3.66E-07	COMG 003	8.36E-07	3.66E-06	COMG 003		
Cadmium	7.66E-06	3.35E-05	COMG 003	7.67E-05	3.36E-04	COMG 003		
Chromium	9.75E-06	4.27E-05	COMG 003	9.76E-05	4.27E-04	COMG 003		
Cobalt	5.85E-07	2.56E-06	COMG 003	5.86E-06	2.56E-05	COMG 003		
Manganese	2.65E-06	1.16E-05	COMG 003	2.65E-05	1.16E-04	COMG 003		
Mercury	1.81E-06	7.93E-06	COMG 003	1.81E-05	7.94E-05	COMG 003		
Nickel	1.46E-05	6.40E-05	COMG 003	1.46E-04	6.41E-04	COMG 003		
Selenium	1.67E-07	7.32E-07	COMG 003	1.67E-06	7.33E-06	COMG 003		
Total HAPs	1.31E-02	5.76E-02	COMG 003	1.32E-01	5.77E-01	COMG 003	2.02E-01	8.85E-01

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	Parts Booth	EQUI71			EQUI72		
		EQUI 71 - Burn Off Oven			EQUI 72 - Emergency Generator MFG Offices		
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)		1.76E-01	7.73E-01	COMG 003	6.79E-01	1.70E-01	COMG 003
Carbon Monoxide (CO)		1.48E-01	6.49E-01	COMG 003	1.36E+00	3.40E-01	COMG 003
Particulate Matter (PM)	COMG 003	1.34E-02	5.87E-02	COMG 003	2.54E-02	6.36E-03	COMG 003
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	1.34E-02	5.87E-02	COMG 003	2.54E-02	6.36E-03	COMG 003
Particulate Matter<2.5 Microns (PM _{2.5})	COMG 003	1.34E-02	5.87E-02	COMG 003	2.54E-02	6.36E-03	COMG 003
Volatile Organic Compounds (VOC)	COMG 003	9.70E-03	4.25E-02	COMG 003	3.40E-01	8.49E-02	COMG 003
Sulfur Dioxide (SO ₂)		1.06E-03	4.64E-03	COMG 003	7.70E-04	1.93E-04	COMG 003
Carbon Dioxide (CO ₂)		2.12E+02	9.28E+02	COMG 003	1.44E+02	3.60E+01	COMG 003
Nitrous Oxide (N ₂ O)		3.88E-03	1.70E-02	COMG 003	2.89E-04	7.22E-05	COMG 003
Methane (CH ₄)		4.06E-03	1.78E-02	COMG 003	2.89E-03	7.22E-04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e)		2.13E+02	9.33E+02	COMG 003	1.44E+02	3.61E+01	COMG 003
Hazardous Air Pollutants							
Lead		8.82E-07	3.86E-06	COMG 003			
Polycyclic Organic Matter (POM)		1.56E-07	6.82E-07	COMG 003	1.85E-04	4.62E-05	COMG 003
Benzene		3.71E-06	1.62E-05	COMG 003	2.07E-03	5.17E-04	COMG 003
Cumene	COMG 003						
Dichlorobenzene		2.12E-06	9.28E-06	COMG 003			
Ethylbenzene	COMG 003				3.25E-05	8.12E-06	COMG 003
Formaldehyde	COMG 003	1.32E-04	5.80E-04	COMG 003	2.69E-02	6.71E-03	COMG 003
Glycol Ethers	COMG 003						
Hexamethylene-1,6-diisocyanate	COMG 003						
Hexane		3.18E-03	1.39E-02	COMG 003			
Methanol	COMG 003						
Methyl Isobutyl Ketone	COMG 003						
Naphthalene		1.08E-06	4.71E-06	COMG 003	1.27E-04	3.18E-05	COMG 003
Toluene	COMG 003	6.00E-06	2.63E-05	COMG 003	7.31E-04	1.83E-04	COMG 003
Xylene	COMG 003				2.55E-04	6.39E-05	COMG 003
1,1,2,2-Tetrachloroethane					3.31E-05	8.29E-06	COMG 003
1,1,2-Trichloroethane					2.00E-05	5.01E-06	COMG 003
1,3-Butadiene					8.69E-04	2.17E-04	COMG 003
1,3-Dichloropropene					1.66E-05	4.16E-06	COMG 003
Acetaldehyde					3.65E-03	9.14E-04	COMG 003
Acrolein					3.45E-03	8.61E-04	COMG 003
Carbon Tetrachloride					2.32E-05	5.80E-06	COMG 003
Chlorobenzene					1.69E-05	4.22E-06	COMG 003
Chloroform					1.79E-05	4.49E-06	COMG 003
Ethylene Dibromide					2.79E-05	6.98E-06	COMG 003
Methylene Chloride					5.40E-05	1.35E-05	COMG 003
Styrene					1.56E-05	3.90E-06	COMG 003
Vinyl Chloride					9.41E-06	2.35E-06	COMG 003
Arsenic		3.53E-07	1.55E-06	COMG 003			
Beryllium		2.12E-08	9.28E-08	COMG 003			
Cadmium		1.94E-06	8.50E-06	COMG 003			
Chromium		2.47E-06	1.08E-05	COMG 003			
Cobalt		1.48E-07	6.49E-07	COMG 003			
Manganese		6.71E-07	2.94E-06	COMG 003			
Mercury		4.59E-07	2.01E-06	COMG 003			
Nickel		3.71E-06	1.62E-05	COMG 003			
Selenium		4.24E-08	1.86E-07	COMG 003			
Total HAPs	COMG 003	3.33E-03	1.46E-02	COMG 003	3.85E-02	9.61E-03	COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI73			EQUI74			EQUI75	
	EQUI 73 - Monorail Prime Booth			EQUI74 - Monorail Topcoat Booth Air Make-Up			EQUI 75 - Monorail Topcoat Booth Air Make-Up	
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)				2.54E-01	1.11E+00	COMG 003		
Carbon Monoxide (CO)				2.13E-01	9.35E-01	COMG 003		
Particulate Matter (PM)	8.80E+00	2.57E+02	COMG 003	1.93E-02	8.46E-02	COMG 003	8.80E+00	2.57E+02
Particulate Matter<10 Microns (PM ₁₀)	8.80E+00	2.57E+02	COMG 003	1.93E-02	8.46E-02	COMG 003	8.80E+00	2.57E+02
Particulate Matter<2.5 Microns (PM _{2.5})	8.80E+00	2.57E+02	COMG 003	1.93E-02	8.46E-02	COMG 003	8.80E+00	2.57E+02
Volatile Organic Compounds (VOC)	1.52E+02	6.65E+02	COMG 003	1.40E-02	6.12E-02	COMG 003	1.52E+02	6.65E+02
Sulfur Dioxide (SO ₂)				1.52E-03	6.68E-03	COMG 003		
Carbon Dioxide (CO ₂)				3.05E+02	1.34E+03	COMG 003		
Nitrous Oxide (N ₂ O)				5.59E-03	2.45E-02	COMG 003		
Methane (CH ₄)				5.84E-03	2.56E-02	COMG 003		
Carbon Dioxide Equivalent (CO ₂ e)				3.07E+02	1.34E+03	COMG 003		
Hazardous Air Pollutants								
Lead				1.27E-06	5.57E-06	COMG 003		
Polycyclic Organic Matter (POM)				2.24E-07	9.82E-07	COMG 003		
Benzene				5.34E-06	2.34E-05	COMG 003		
Cumene	6.67E-01	2.92E+00	COMG 003				6.67E-01	2.92E+00
Dichlorobenzene				3.05E-06	1.34E-05	COMG 003		
Ethylbenzene	1.72E+00	7.54E+00	COMG 003				1.72E+00	7.54E+00
Formaldehyde	5.71E-02	2.50E-01	COMG 003	1.91E-04	8.35E-04	COMG 003	5.71E-02	2.50E-01
Glycol Ethers	3.70E+01	1.62E+02	COMG 003				3.70E+01	1.62E+02
Hexamethylene-1,6-diisocyanate	1.35E-01	5.92E-01	COMG 003				1.35E-01	5.92E-01
Hexane				4.57E-03	2.00E-02	COMG 003		
Methanol	1.14E-01	5.00E-01	COMG 003				1.14E-01	5.00E-01
Methyl Isobutyl Ketone	1.33E+01	5.82E+01	COMG 003				1.33E+01	5.82E+01
Naphthalene				1.55E-06	6.79E-06	COMG 003		
Toluene	1.65E-01	7.21E-01	COMG 003	8.64E-06	3.78E-05	COMG 003	1.65E-01	7.21E-01
Xylene	7.54E+00	3.30E+01	COMG 003				7.54E+00	3.30E+01
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic				5.08E-07	2.23E-06	COMG 003		
Beryllium				3.05E-08	1.34E-07	COMG 003		
Cadmium				2.80E-06	1.22E-05	COMG 003		
Chromium				3.56E-06	1.56E-05	COMG 003		
Cobalt				2.13E-07	9.35E-07	COMG 003		
Manganese				9.66E-07	4.23E-06	COMG 003		
Mercury				6.61E-07	2.89E-06	COMG 003		
Nickel				5.34E-06	2.34E-05	COMG 003		
Selenium				6.10E-08	2.67E-07	COMG 003		
Total HAPs	6.06E+01	2.66E+02	COMG 003	4.80E-03	2.10E-02	COMG 003	6.06E+01	2.66E+02

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant		EQUI76			EQUI77			
	Paint Booth	EQUI 76 - Monorail Prime Booth Air Make-Up			EQUI 77 - Monorail Curing Oven			EQUI 80
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)
Nitrogen Oxides (NO _x)		2.54E-01	1.11E+00	COMG 003	2.94E-01	1.29E+00	COMG 003	
Carbon Monoxide (CO)		2.13E-01	9.35E-01	COMG 003	2.47E-01	1.08E+00	COMG 003	
Particulate Matter (PM)	COMG 003	1.93E-02	8.46E-02	COMG 003	2.24E-02	9.79E-02	COMG 003	2.15E-01
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	1.93E-02	8.46E-02	COMG 003	2.24E-02	9.79E-02	COMG 003	2.15E-01
Particulate Matter<2.5 Microns (PM _{2.5})	COMG 003	1.93E-02	8.46E-02	COMG 003	2.24E-02	9.79E-02	COMG 003	2.15E-01
Volatile Organic Compounds (VOC)	COMG 003	1.40E-02	6.12E-02	COMG 003	1.62E-02	7.08E-02	COMG 003	1.64E+02
Sulfur Dioxide (SO ₂)		1.52E-03	6.68E-03	COMG 003	1.76E-03	7.73E-03	COMG 003	
Carbon Dioxide (CO ₂)		3.05E+02	1.34E+03	COMG 003	3.53E+02	1.55E+03	COMG 003	
Nitrous Oxide (N ₂ O)		5.59E-03	2.45E-02	COMG 003	6.47E-03	2.83E-02	COMG 003	
Methane (CH ₄)		5.84E-03	2.56E-02	COMG 003	6.77E-03	2.96E-02	COMG 003	
Carbon Dioxide Equivalent (CO ₂ e)		3.07E+02	1.34E+03	COMG 003	3.55E+02	1.56E+03	COMG 003	
Hazardous Air Pollutants								
Lead		1.27E-06	5.57E-06	COMG 003	1.47E-06	6.44E-06	COMG 003	
Polycyclic Organic Matter (POM)		2.24E-07	9.82E-07	COMG 003	2.59E-07	1.14E-06	COMG 003	
Benzene		5.34E-06	2.34E-05	COMG 003	6.18E-06	2.71E-05	COMG 003	
Cumene	COMG 003							7.22E-01
Dichlorobenzene		3.05E-06	1.34E-05	COMG 003	3.53E-06	1.55E-05	COMG 003	
Ethylbenzene	COMG 003							1.87E+00
Formaldehyde	COMG 003	1.91E-04	8.35E-04	COMG 003	2.21E-04	9.66E-04	COMG 003	6.19E-02
Glycol Ethers	COMG 003							4.00E+01
Hexamethylene-1,6-diisocyanate	COMG 003							1.46E-01
Hexane		4.57E-03	2.00E-02	COMG 003	5.29E-03	2.32E-02	COMG 003	
Methanol	COMG 003							1.24E-01
Methyl Isobutyl Ketone	COMG 003							1.44E+01
Naphthalene		1.55E-06	6.79E-06	COMG 003	1.79E-06	7.86E-06	COMG 003	
Toluene	COMG 003	8.64E-06	3.78E-05	COMG 003	1.00E-05	4.38E-05	COMG 003	1.78E-01
Xylene	COMG 003							8.17E+00
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic		5.08E-07	2.23E-06	COMG 003	5.88E-07	2.58E-06	COMG 003	
Beryllium		3.05E-08	1.34E-07	COMG 003	3.53E-08	1.55E-07	COMG 003	
Cadmium		2.80E-06	1.22E-05	COMG 003	3.24E-06	1.42E-05	COMG 003	
Chromium		3.56E-06	1.56E-05	COMG 003	4.12E-06	1.80E-05	COMG 003	
Cobalt		2.13E-07	9.35E-07	COMG 003	2.47E-07	1.08E-06	COMG 003	
Manganese		9.66E-07	4.23E-06	COMG 003	1.12E-06	4.90E-06	COMG 003	
Mercury		6.61E-07	2.89E-06	COMG 003	7.65E-07	3.35E-06	COMG 003	
Nickel		5.34E-06	2.34E-05	COMG 003	6.18E-06	2.71E-05	COMG 003	
Selenium		6.10E-08	2.67E-07	COMG 003	7.06E-08	3.09E-07	COMG 003	
Total HAPs	COMG 003	4.80E-03	2.10E-02	COMG 003	5.55E-03	2.43E-02	COMG 003	6.57E+01

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI80		EQUI81			EQUI82		
	Side Loader Paint Booth		EQUI 81 - Side Loader Paint Booth Air Make-Up			EQUI 82 - Side Loader Prime Booth		
Criteria Air Pollutants & HAPs	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)			4.04E-01	1.77E+00	COMG 003			
Carbon Monoxide (CO)			3.40E-01	1.49E+00	COMG 003			
Particulate Matter (PM)	2.79E+02	COMG 003	3.07E-02	1.35E-01	COMG 003	2.15E-01	2.79E+02	COMG 003
Particulate Matter<10 Microns (PM ₁₀)	2.79E+02	COMG 003	3.07E-02	1.35E-01	COMG 003	2.15E-01	2.79E+02	COMG 003
Particulate Matter<2.5 Microns (PM _{2.5})	2.79E+02	COMG 003	3.07E-02	1.35E-01	COMG 003	2.15E-01	2.79E+02	COMG 003
Volatile Organic Compounds (VOC)	7.20E+02	COMG 003	2.22E-02	9.74E-02	COMG 003	1.64E+02	7.20E+02	COMG 003
Sulfur Dioxide (SO ₂)			2.43E-03	1.06E-02	COMG 003			
Carbon Dioxide (CO ₂)			4.85E+02	2.13E+03	COMG 003			
Nitrous Oxide (N ₂ O)			8.90E-03	3.90E-02	COMG 003			
Methane (CH ₄)			9.30E-03	4.07E-02	COMG 003			
Carbon Dioxide Equivalent (CO ₂ e)			4.88E+02	2.14E+03	COMG 003			
Hazardous Air Pollutants								
Lead			2.02E-06	8.86E-06	COMG 003			
Polycyclic Organic Matter (POM)			3.57E-07	1.56E-06	COMG 003			
Benzene			8.49E-06	3.72E-05	COMG 003			
Cumene	3.16E+00	COMG 003				7.22E-01	3.16E+00	COMG 003
Dichlorobenzene			4.85E-06	2.13E-05	COMG 003			
Ethylbenzene	8.17E+00	COMG 003				1.87E+00	8.17E+00	COMG 003
Formaldehyde	2.71E-01	COMG 003	3.03E-04	1.33E-03	COMG 003	6.19E-02	2.71E-01	COMG 003
Glycol Ethers	1.75E+02	COMG 003				4.00E+01	1.75E+02	COMG 003
Hexamethylene-1,6-diisocyanate	6.41E-01	COMG 003				1.46E-01	6.41E-01	COMG 003
Hexane			7.28E-03	3.19E-02	COMG 003			
Methanol	5.42E-01	COMG 003				1.24E-01	5.42E-01	COMG 003
Methyl Isobutyl Ketone	6.30E+01	COMG 003				1.44E+01	6.30E+01	COMG 003
Naphthalene			2.47E-06	1.08E-05	COMG 003			
Toluene	7.81E-01	COMG 003	1.38E-05	6.02E-05	COMG 003	1.78E-01	7.81E-01	COMG 003
Xylene	3.58E+01	COMG 003				8.17E+00	3.58E+01	COMG 003
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic			8.09E-07	3.54E-06	COMG 003			
Beryllium			4.85E-08	2.13E-07	COMG 003			
Cadmium			4.45E-06	1.95E-05	COMG 003			
Chromium			5.66E-06	2.48E-05	COMG 003			
Cobalt			3.40E-07	1.49E-06	COMG 003			
Manganese			1.54E-06	6.73E-06	COMG 003			
Mercury			1.05E-06	4.61E-06	COMG 003			
Nickel			8.49E-06	3.72E-05	COMG 003			
Selenium			9.71E-08	4.25E-07	COMG 003			
Total HAPs	2.88E+02	COMG 003	7.64E-03	3.35E-02	COMG 003	6.57E+01	2.88E+02	COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI83			EQUI84			EQUI85	
	EQUI 83 - Side Loader Prime Booth Air Make-Up			EQUI 84 - Side Loader Clear Coat Booth			EQUI 85 - Side Loader Clear Coat Booth Air Make-Up	
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)	4.04E-01	1.77E+00	COMG 003				4.04E-01	1.77E+00
Carbon Monoxide (CO)	3.40E-01	1.49E+00	COMG 003				3.40E-01	1.49E+00
Particulate Matter (PM)	3.07E-02	1.35E-01	COMG 003	2.15E-01	2.79E+02	COMG 003	3.07E-02	1.35E-01
Particulate Matter<10 Microns (PM ₁₀)	3.07E-02	1.35E-01	COMG 003	2.15E-01	2.79E+02	COMG 003	3.07E-02	1.35E-01
Particulate Matter<2.5 Microns (PM _{2.5})	3.07E-02	1.35E-01	COMG 003	2.15E-01	2.79E+02	COMG 003	3.07E-02	1.35E-01
Volatile Organic Compounds (VOC)	2.22E-02	9.74E-02	COMG 003	1.64E+02	7.20E+02	COMG 003	2.22E-02	9.74E-02
Sulfur Dioxide (SO ₂)	2.43E-03	1.06E-02	COMG 003				2.43E-03	1.06E-02
Carbon Dioxide (CO ₂)	4.85E+02	2.13E+03	COMG 003				4.85E+02	2.13E+03
Nitrous Oxide (N ₂ O)	8.90E-03	3.90E-02	COMG 003				8.90E-03	3.90E-02
Methane (CH ₄)	9.30E-03	4.07E-02	COMG 003				9.30E-03	4.07E-02
Carbon Dioxide Equivalent (CO ₂ e)	4.88E+02	2.14E+03	COMG 003				4.88E+02	2.14E+03
Hazardous Air Pollutants								
Lead	2.02E-06	8.86E-06	COMG 003				2.02E-06	8.86E-06
Polycyclic Organic Matter (POM)	3.57E-07	1.56E-06	COMG 003				3.57E-07	1.56E-06
Benzene	8.49E-06	3.72E-05	COMG 003				8.49E-06	3.72E-05
Cumene				7.22E-01	3.16E+00	COMG 003		
Dichlorobenzene	4.85E-06	2.13E-05	COMG 003				4.85E-06	2.13E-05
Ethylbenzene				1.87E+00	8.17E+00	COMG 003		
Formaldehyde	3.03E-04	1.33E-03	COMG 003	6.19E-02	2.71E-01	COMG 003	3.03E-04	1.33E-03
Glycol Ethers				4.00E+01	1.75E+02	COMG 003		
Hexamethylene-1,6-diisocyanate				1.46E-01	6.41E-01	COMG 003		
Hexane	7.28E-03	3.19E-02	COMG 003				7.28E-03	3.19E-02
Methanol				1.24E-01	5.42E-01	COMG 003		
Methyl Isobutyl Ketone				1.44E+01	6.30E+01	COMG 003		
Naphthalene	2.47E-06	1.08E-05	COMG 003				2.47E-06	1.08E-05
Toluene	1.38E-05	6.02E-05	COMG 003	1.78E-01	7.81E-01	COMG 003	1.38E-05	6.02E-05
Xylene				8.17E+00	3.58E+01	COMG 003		
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic	8.09E-07	3.54E-06	COMG 003				8.09E-07	3.54E-06
Beryllium	4.85E-08	2.13E-07	COMG 003				4.85E-08	2.13E-07
Cadmium	4.45E-06	1.95E-05	COMG 003				4.45E-06	1.95E-05
Chromium	5.66E-06	2.48E-05	COMG 003				5.66E-06	2.48E-05
Cobalt	3.40E-07	1.49E-06	COMG 003				3.40E-07	1.49E-06
Manganese	1.54E-06	6.73E-06	COMG 003				1.54E-06	6.73E-06
Mercury	1.05E-06	4.61E-06	COMG 003				1.05E-06	4.61E-06
Nickel	8.49E-06	3.72E-05	COMG 003				8.49E-06	3.72E-05
Selenium	9.71E-08	4.25E-07	COMG 003				9.71E-08	4.25E-07
Total HAPs	7.64E-03	3.35E-02	COMG 003	6.57E+01	2.88E+02	COMG 003	7.64E-03	3.35E-02

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant		EQUI86			EQUI87			
	ar Coat Booth	EQUI 86 - Side Loader Curing Oven			EQUI 87 - Monorail Blast Booth			EQUI 88
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)
Nitrogen Oxides (NO _x)	COMG 003	1.62E-01	7.08E-01	COMG 003				1.82E-01
Carbon Monoxide (CO)	COMG 003	1.36E-01	5.95E-01	COMG 003				1.53E-01
Particulate Matter (PM)	COMG 003	1.23E-02	5.38E-02	COMG 003	8.12E-01	3.56E+00	3.56E+00	1.39E-02
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	1.23E-02	5.38E-02	COMG 003	3.91E-01	1.71E+00	1.71E+00	1.39E-02
Particulate Matter<2.5 Microns (PM ₂)	COMG 003	1.23E-02	5.38E-02	COMG 003	3.91E-02	1.71E-01	1.71E-01	1.39E-02
Volatile Organic Compounds (VOC)	COMG 003	8.89E-03	3.90E-02	COMG 003				1.00E-02
Sulfur Dioxide (SO ₂)	COMG 003	9.70E-04	4.25E-03	COMG 003				1.09E-03
Carbon Dioxide (CO ₂)	COMG 003	1.94E+02	8.50E+02	COMG 003				2.19E+02
Nitrous Oxide (N ₂ O)	COMG 003	3.56E-03	1.56E-02	COMG 003				4.01E-03
Methane (CH4)	COMG 003	3.72E-03	1.63E-02	COMG 003				4.19E-03
Carbon Dioxide Equivalent (CO ₂ e)	COMG 003	1.95E+02	8.55E+02	COMG 003				2.20E+02
Hazardous Air Pollutants								
Lead	COMG 003	8.09E-07	3.54E-06	COMG 003				9.12E-07
Polycyclic Organic Matter (POM)	COMG 003	1.43E-07	6.25E-07	COMG 003				1.61E-07
Benzene	COMG 003	3.40E-06	1.49E-05	COMG 003				3.83E-06
Cumene								
Dichlorobenzene	COMG 003	1.94E-06	8.50E-06	COMG 003				2.19E-06
Ethylbenzene								
Formaldehyde	COMG 003	1.21E-04	5.31E-04	COMG 003				1.37E-04
Glycol Ethers								
Hexamethylene-1,6-diisocyanate								
Hexane	COMG 003	2.91E-03	1.28E-02	COMG 003				3.28E-03
Methanol								
Methyl Isobutyl Ketone								
Naphthalene	COMG 003	9.87E-07	4.32E-06	COMG 003				1.11E-06
Toluene	COMG 003	5.50E-06	2.41E-05	COMG 003				6.20E-06
Xylene								
1,1,2,2-Tetrachloroethane								
1,1,2-Trichloroethane								
1,3-Butadiene								
1,3-Dichloropropene								
Acetaldehyde								
Acrolein								
Carbon Tetrachloride								
Chlorobenzene								
Chloroform								
Ethylene Dibromide								
Methylene Chloride								
Styrene								
Vinyl Chloride								
Arsenic	COMG 003	3.24E-07	1.42E-06	COMG 003				3.65E-07
Beryllium	COMG 003	1.94E-08	8.50E-08	COMG 003				2.19E-08
Cadmium	COMG 003	1.78E-06	7.79E-06	COMG 003				2.01E-06
Chromium	COMG 003	2.26E-06	9.92E-06	COMG 003				2.55E-06
Cobalt	COMG 003	1.36E-07	5.95E-07	COMG 003				1.53E-07
Manganese	COMG 003	6.15E-07	2.69E-06	COMG 003				6.93E-07
Mercury	COMG 003	4.21E-07	1.84E-06	COMG 003				4.74E-07
Nickel	COMG 003	3.40E-06	1.49E-05	COMG 003				3.83E-06
Selenium	COMG 003	3.88E-08	1.70E-07	COMG 003				4.38E-08
Total HAPs	COMG 003	3.05E-03	1.34E-02	COMG 003	0.00E+00	0.00E+00	0.00E+00	3.44E-03

*EQUI 87 is the only SI not in COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI88		EQUI89			EQUI90	
	Various Power Washer Heaters		EQUI 89 - JPD I Emergency Generator			EQUI 90 - HR Emergency	
Criteria Air Pollutants & HAPs	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)
Nitrogen Oxides (NO _x)	7.98E-01	COMG 003	8.13E-01	2.03E-01	COMG 003	6.79E-01	1.70E-01
Carbon Monoxide (CO)	6.71E-01	COMG 003	1.63E+00	4.06E-01	COMG 003	1.36E+00	3.40E-01
Particulate Matter (PM)	6.07E-02	COMG 003	2.50E-02	6.26E-03	COMG 003	2.54E-02	6.36E-03
Particulate Matter<10 Microns (PM ₁₀)	6.07E-02	COMG 003	2.50E-02	6.26E-03	COMG 003	2.54E-02	6.36E-03
Particulate Matter<2.5 Microns (PM _{2.5})	6.07E-02	COMG 003	2.50E-02	6.26E-03	COMG 003	2.54E-02	6.36E-03
Volatile Organic Compounds (VOC)	4.39E-02	COMG 003	4.06E-01	1.02E-01	COMG 003	3.40E-01	8.49E-02
Sulfur Dioxide (SO ₂)	4.79E-03	COMG 003	7.59E-04	1.90E-04	COMG 003	7.70E-04	1.93E-04
Carbon Dioxide (CO ₂)	9.58E+02	COMG 003	1.42E+02	3.55E+01	COMG 003	1.44E+02	3.60E+01
Nitrous Oxide (N ₂ O)	1.76E-02	COMG 003	2.84E-04	7.11E-05	COMG 003	2.89E-04	7.22E-05
Methane (CH ₄)	1.84E-02	COMG 003	2.84E-03	7.11E-04	COMG 003	2.89E-03	7.22E-04
Carbon Dioxide Equivalent (CO ₂ e)	9.64E+02	COMG 003	1.42E+02	3.55E+01	COMG 003	1.44E+02	3.61E+01
Hazardous Air Pollutants							
Lead	3.99E-06	COMG 003					
Polycyclic Organic Matter (POM)	7.04E-07	COMG 003	1.82E-04	4.55E-05	COMG 003	1.85E-04	4.62E-05
Benzene	1.68E-05	COMG 003	2.04E-03	5.10E-04	COMG 003	2.07E-03	5.17E-04
Cumene							
Dichlorobenzene	9.58E-06	COMG 003					
Ethylbenzene			3.20E-05	8.00E-06	COMG 003	3.25E-05	8.12E-06
Formaldehyde	5.99E-04	COMG 003	2.64E-02	6.61E-03	COMG 003	2.69E-02	6.71E-03
Glycol Ethers							
Hexamethylene-1,6-diisocyanate							
Hexane	1.44E-02	COMG 003					
Methanol							
Methyl Isobutyl Ketone							
Naphthalene	4.87E-06	COMG 003	1.25E-04	3.13E-05	COMG 003	1.27E-04	3.18E-05
Toluene	2.72E-05	COMG 003	7.20E-04	1.80E-04	COMG 003	7.31E-04	1.83E-04
Xylene			2.52E-04	6.29E-05	COMG 003	2.55E-04	6.39E-05
1,1,2,2-Tetrachloroethane			3.26E-05	8.16E-06	COMG 003	3.31E-05	8.29E-06
1,1,2-Trichloroethane			1.97E-05	4.93E-06	COMG 003	2.00E-05	5.01E-06
1,3-Butadiene			8.55E-04	2.14E-04	COMG 003	8.69E-04	2.17E-04
1,3-Dichloropropene			1.64E-05	4.10E-06	COMG 003	1.66E-05	4.16E-06
Acetaldehyde			3.60E-03	9.00E-04	COMG 003	3.65E-03	9.14E-04
Acrolein			3.39E-03	8.48E-04	COMG 003	3.45E-03	8.61E-04
Carbon Tetrachloride			2.28E-05	5.71E-06	COMG 003	2.32E-05	5.80E-06
Chlorobenzene			1.66E-05	4.16E-06	COMG 003	1.69E-05	4.22E-06
Chloroform			1.77E-05	4.42E-06	COMG 003	1.79E-05	4.49E-06
Ethylene Dibromide			2.75E-05	6.87E-06	COMG 003	2.79E-05	6.98E-06
Methylene Chloride			5.31E-05	1.33E-05	COMG 003	5.40E-05	1.35E-05
Styrene			1.56E-05	3.90E-06	COMG 003	1.54E-05	3.84E-06
Vinyl Chloride			9.41E-06	2.35E-06	COMG 003	9.26E-06	2.32E-06
Arsenic	1.60E-06	COMG 003					
Beryllium	9.58E-08	COMG 003					
Cadmium	8.79E-06	COMG 003					
Chromium	1.12E-05	COMG 003					
Cobalt	6.71E-07	COMG 003					
Manganese	3.04E-06	COMG 003					
Mercury	2.08E-06	COMG 003					
Nickel	1.68E-05	COMG 003					
Selenium	1.92E-07	COMG 003					
Total HAPs	1.51E-02	COMG 003	3.79E-02	9.47E-03	COMG 003	3.85E-02	9.61E-03

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	Generator	EQUI91		EQUI92			
		EQUI 91 - Refuse Line Curing Oven		EQUI 92: Large Parts Curing Oven			
Criteria Air Pollutants & HAPs	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)	COMG 003	5.39E-01	2.36E+00	COMG 003	1.62E-01	7.08E-01	COMG 003
Carbon Monoxide (CO)	COMG 003	4.53E-01	1.98E+00	COMG 003	1.36E-01	5.95E-01	COMG 003
Particulate Matter (PM)	COMG 003	4.10E-02	1.79E-01	COMG 003	1.23E-02	5.38E-02	COMG 003
Particulate Matter<10 Microns (PM ₁₀)	COMG 003	4.10E-02	1.79E-01	COMG 003	1.23E-02	5.38E-02	COMG 003
Particulate Matter<2.5 Microns (PM _{2.5})	COMG 003	4.10E-02	1.79E-01	COMG 003	1.23E-02	5.38E-02	COMG 003
Volatile Organic Compounds (VOC)	COMG 003	2.96E-02	1.30E-01	COMG 003	8.89E-03	3.90E-02	COMG 003
Sulfur Dioxide (SO ₂)	COMG 003	3.23E-03	1.42E-02	COMG 003	9.70E-04	4.25E-03	COMG 003
Carbon Dioxide (CO ₂)	COMG 003	6.47E+02	2.83E+03	COMG 003	1.94E+02	8.50E+02	COMG 003
Nitrous Oxide (N ₂ O)	COMG 003	1.19E-02	5.20E-02	COMG 003	3.56E-03	1.56E-02	COMG 003
Methane (CH ₄)	COMG 003	1.24E-02	5.43E-02	COMG 003	3.72E-03	1.63E-02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e)	COMG 003	6.51E+02	2.85E+03	COMG 003	1.95E+02	8.55E+02	COMG 003
Hazardous Air Pollutants							
Lead		2.70E-06	1.18E-05	COMG 003	8.09E-07	3.54E-06	COMG 003
Polycyclic Organic Matter (POM)	COMG 003	4.76E-07	2.08E-06	COMG 003	1.43E-07	6.25E-07	COMG 003
Benzene	COMG 003	1.13E-05	4.96E-05	COMG 003	3.40E-06	1.49E-05	COMG 003
Cumene							
Dichlorobenzene		6.47E-06	2.83E-05	COMG 003	1.94E-06	8.50E-06	COMG 003
Ethylbenzene	COMG 003						
Formaldehyde	COMG 003	4.04E-04	1.77E-03	COMG 003	1.21E-04	5.31E-04	COMG 003
Glycol Ethers							
Hexamethylene-1,6-diisocyanate							
Hexane		9.71E-03	4.25E-02	COMG 003	2.91E-03	1.28E-02	COMG 003
Methanol							
Methyl Isobutyl Ketone							
Naphthalene	COMG 003	3.29E-06	1.44E-05	COMG 003	9.87E-07	4.32E-06	COMG 003
Toluene	COMG 003	1.83E-05	8.03E-05	COMG 003	5.50E-06	2.41E-05	COMG 003
Xylene	COMG 003						
1,1,2,2-Tetrachloroethane	COMG 003						
1,1,2-Trichloroethane	COMG 003						
1,3-Butadiene	COMG 003						
1,3-Dichloropropene	COMG 003						
Acetaldehyde	COMG 003						
Acrolein	COMG 003						
Carbon Tetrachloride	COMG 003						
Chlorobenzene	COMG 003						
Chloroform	COMG 003						
Ethylene Dibromide	COMG 003						
Methylene Chloride	COMG 003						
Styrene	COMG 003						
Vinyl Chloride	COMG 003						
Arsenic		1.08E-06	4.72E-06	COMG 003	3.24E-07	1.42E-06	COMG 003
Beryllium		6.47E-08	2.83E-07	COMG 003	1.94E-08	8.50E-08	COMG 003
Cadmium		5.93E-06	2.60E-05	COMG 003	1.78E-06	7.79E-06	COMG 003
Chromium		7.55E-06	3.31E-05	COMG 003	2.26E-06	9.92E-06	COMG 003
Cobalt		4.53E-07	1.98E-06	COMG 003	1.36E-07	5.95E-07	COMG 003
Manganese		2.05E-06	8.97E-06	COMG 003	6.15E-07	2.69E-06	COMG 003
Mercury		1.40E-06	6.14E-06	COMG 003	4.21E-07	1.84E-06	COMG 003
Nickel		1.13E-05	4.96E-05	COMG 003	3.40E-06	1.49E-05	COMG 003
Selenium		1.29E-07	5.67E-07	COMG 003	3.88E-08	1.70E-07	COMG 003
Total HAPs	COMG 003	1.02E-02	4.46E-02	COMG 003	3.05E-03	1.34E-02	COMG 003

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	EQUI93			COMG 003			
	EQUI 93 - Lines 3-5 Curing Oven			COMG 003			
Criteria Air Pollutants & HAPs	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)	Unrestricted (tpy)	Limited (tpy)	Potential (lb/hr)
Nitrogen Oxides (NO _x)	3.50E-01	1.53E+00	COMG 003			65.0	16.9
Carbon Monoxide (CO)	2.94E-01	1.29E+00	COMG 003			55.2	16.7
Particulate Matter (PM)	2.66E-02	1.17E-01	COMG 003			71.2	96.3
Particulate Matter<10 Microns (PM ₁₀)	2.66E-02	1.17E-01	COMG 003			71.2	95.9
Particulate Matter<2.5 Microns (PM _{2.5})	2.66E-02	1.17E-01	COMG 003			71.2	95.5
Volatile Organic Compounds (VOC)	1.93E-02	8.44E-02	COMG 003			237.0	2,351
Sulfur Dioxide (SO ₂)	2.10E-03	9.21E-03	COMG 003			0.387	0.1
Carbon Dioxide (CO ₂)	4.21E+02	1.84E+03	COMG 003			77,481	18,095
Nitrous Oxide (N ₂ O)	7.71E-03	3.38E-02	COMG 003			1.4188	0.32
Methane (CH4)	8.06E-03	3.53E-02	COMG 003			1.4852	0.35
Carbon Dioxide Equivalent (CO ₂ e)	4.23E+02	1.85E+03	COMG 003			77,941	18,201
Hazardous Air Pollutants							
Lead	1.75E-06	7.68E-06	COMG 003			3.22E-04	7.36E-05
Polycyclic Organic Matter (POM)	3.09E-07	1.35E-06	COMG 003			1.95E-04	5.64E-04
Benzene	7.36E-06	3.22E-05	COMG 003			2.90E-03	6.49E-03
Cumene						5.40	10.10
Dichlorobenzene	4.21E-06	1.84E-05	COMG 003			7.74E-04	1.77E-04
Ethylbenzene						12.9	26.1
Formaldehyde	2.63E-04	1.15E-03	COMG 003			0.63	0.96
Glycol Ethers						237.00	559.77
Hexamethylene-1,6-diisocyanate						1.12	2.05
Hexane	6.31E-03	2.76E-02	COMG 003			1.16	0.26
Methanol						2.39	2.02
Methyl Isobutyl Ketone						99.5	203.5
Naphthalene	2.14E-06	9.36E-06	COMG 003			4.88E-04	4.69E-04
Toluene	1.19E-05	5.22E-05	COMG 003			1.17E+01	4.86E+00
Xylene						65.2	116.2
1,1,2,2-Tetrachloroethane						2.47E-05	9.89E-05
1,1,2-Trichloroethane						1.50E-05	5.98E-05
1,3-Butadiene						6.48E-04	2.59E-03
1,3-Dichloropropene						1.24E-05	4.97E-05
Acetaldehyde						2.73E-03	1.09E-02
Acrolein						2.57E-03	1.03E-02
Carbon Tetrachloride						1.73E-05	6.92E-05
Chlorobenzene						1.26E-05	5.04E-05
Chloroform						1.34E-05	5.36E-05
Ethylene Dibromide						2.08E-05	8.33E-05
Methylene Chloride						4.03E-05	1.61E-04
Styrene						1.16E-05	4.65E-05
Vinyl Chloride						7.02E-06	2.81E-05
Arsenic	7.01E-07	3.07E-06	COMG 003			1.29E-04	2.94E-05
Beryllium	4.21E-08	1.84E-07	COMG 003			7.74E-06	1.77E-06
Cadmium	3.86E-06	1.69E-05	COMG 003			7.09E-04	1.62E-04
Chromium	4.91E-06	2.15E-05	COMG 003			9.03E-04	2.06E-04
Cobalt	2.94E-07	1.29E-06	COMG 003			5.42E-05	1.24E-05
Manganese	1.33E-06	5.83E-06	COMG 003			2.45E-04	5.59E-05
Mercury	9.11E-07	3.99E-06	COMG 003			1.68E-04	3.83E-05
Nickel	7.36E-06	3.22E-05	COMG 003			1.35E-03	3.09E-04
Selenium	8.41E-08	3.68E-07	COMG 003			1.55E-05	3.53E-06
Total HAPs	6.62E-03	2.90E-02	COMG 003			237.0	925.8

**McNeilus Truck and Manufacturing
Potential Emission Summary**

Pollutant	Total Facility	
Criteria Air Pollutants & HAPs	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x)	65.0	65.0
Carbon Monoxide (CO)	55.2	55.2
Particulate Matter (PM)	3,902	74.8
Particulate Matter<10 Microns (PM ₁₀)	3,900	72.9
Particulate Matter<2.5 Microns (PM _{2.5})	3,898	71.4
Volatile Organic Compounds (VOC)	10,291	237.0
Sulfur Dioxide (SO ₂)	0.4	0.387
Carbon Dioxide (CO ₂)	77,481	77,481
Nitrous Oxide (N ₂ O)	1.42	1.42
Methane (CH ₄)	1.49	1.49
Carbon Dioxide Equivalent (CO ₂ e)	77,941	77,941
Hazardous Air Pollutants		
Lead	3.22E-04	3.22E-04
Polycyclic Organic Matter (POM)	1.95E-04	1.95E-04
Benzene	2.90E-03	2.90E-03
Cumene	44.23	5.40
Dichlorobenzene	7.74E-04	7.74E-04
Ethylbenzene	114.2	12.9
Formaldehyde	3.86	0.63
Glycol Ethers	2451.77	237.00
Hexamethylene-1,6-diisocyanate	8.96	1.12
Hexane	1.16	1.16
Methanol	8.85	2.39
Methyl Isobutyl Ketone	891.2	99.5
Naphthalene	4.88E-04	4.88E-04
Toluene	2.13E+01	1.17E+01
Xylene	508.9	65.2
1,1,2,2-Tetrachloroethane	2.47E-05	2.47E-05
1,1,2-Trichloroethane	1.50E-05	1.50E-05
1,3-Butadiene	6.48E-04	6.48E-04
1,3-Dichloropropene	1.24E-05	1.24E-05
Acetaldehyde	2.73E-03	2.73E-03
Acrolein	2.57E-03	2.57E-03
Carbon Tetrachloride	1.73E-05	1.73E-05
Chlorobenzene	1.26E-05	1.26E-05
Chloroform	1.34E-05	1.34E-05
Ethylene Dibromide	2.08E-05	2.08E-05
Methylene Chloride	4.03E-05	4.03E-05
Styrene	1.16E-05	1.16E-05
Vinyl Chloride	7.02E-06	7.02E-06
Arsenic	1.29E-04	1.29E-04
Beryllium	7.74E-06	7.74E-06
Cadmium	7.09E-04	7.09E-04
Chromium	9.03E-04	9.03E-04
Cobalt	5.42E-05	5.42E-05
Manganese	2.45E-04	2.45E-04
Mercury	1.68E-04	1.68E-04
Nickel	1.35E-03	1.35E-03
Selenium	1.55E-05	1.55E-05
Total HAPs	4054.5	237.0

McNeilus Truck & Manufacturing, Inc.
Minor Amendment IND20220008

This tab summarizes the emissions change made from Minor Amendment IND20220008.

Parts Paint One (REMOVED)	
EQUI 27	North Paint Prime and Paint
EQUI 30	North Paint Prime and Paint Air Make-Up
EQUI 23	North Paint Curing Oven

Parts Paint Two (REMOVED)	
EQUI 25	Monorail Small Parts Prime and Paint
EQUI 31	Monorail Small Parts Prime and Paint Air Make-Up
EQUI 61	Monorail Small Parts Curing Oven

Paint Line One (REMOVED)	
EQUI 19	Line 1 Prime Booth
EQUI 49	Line 1 Prime Booth Air Make-Up
EQUI 47	Line 1 Paint Booth
EQUI 50	Line 1 Paint Booth Air Make-Up
EQUI 48	Line 1 Oven

Paint Line Two (REMOVED)	
EQUI 20	Line 2 Prime Booth
EQUI 53	Line 2 Prime Booth Air Make-Up
EQUI 51	Line 2 Paint Booth
EQUI 54	Line 2 Paint Booth Air Make-Up
EQUI 52	Paint Line 2 Oven

New Equipment	
EQUI 70:	Monorail Small Parts Booth
EQUI 71:	Burn Off Oven
EQUI 73:	Monorail Prime Booth
EQUI 74:	Monorail Topcoat Booth Air Make-up (MAU 97)
EQUI 75:	Monorail Topcoat Booth
EQUI 76:	Monorail Prime Booth Air Make-up (MUA 94)
EQUI 77:	Monorail Curing Oven
EQUI 80:	Side Loader Paint Booth
EQUI 81:	Side Loader Paint Booth Air Make-Up (MAU 64)
EQUI 82:	Side Loader Prime Booth
EQUI 83:	Side Loader Prime Booth Air Make-Up
EQUI 84:	Side Loader Clear Coat Booth
EQUI 85:	Side Loader Clear Coat Booth Air Make-Up
EQUI 86:	Side Loader Curing Oven
EQUI 87:	Blast Booth Monorail
EQUI 88:	Various Power Wash Heaters

Title I Emissions Summary

The calculation method for this increase is described on form CH-04b.

The calculation method is for minor PSD sources.

The potential emissions are in tpy.

The new units are subject to the VOC cap at the facility (237 tpy).

The new units are controlled by federally enforceable fabric filters.

This calculation method does not take into account the removal of units.

Unlimited Potential from Units Added

Pollutant	EQUI 70	EQUI 71	EQUI 73	EQUI 74	EQUI 75	EQUI 76	EQUI 77
PM	0.86	0.06	257.1	0.08	257.1	0.08	0.10
PM ₁₀	0.86	0.06	257.1	0.08	257.1	0.08	0.10
PM _{2.5}	0.86	0.06	257.1	0.08	257.1	0.08	0.10
NO _x	-	0.77	-	1.11	-	1.11	1.29
SO ₂	-	0.00	-	0.01	-	0.01	0.01
CO	-	0.65	-	0.93	-	0.93	1.08
VOC	2.22	4.25E-02	664.69	0.06	664.69	0.06	0.07
Lead	-	3.86E-06	-	5.57E-06	-	5.57E-06	6.44E-06
CO ₂ e	-	933	-	1344	-	1344	1555

Limited Potential from Units Added

Pollutant	EQUI 70	EQUI 71	EQUI 73	EQUI 74	EQUI 75	EQUI 76	EQUI 77
PM	0.86	0.06	38.6	0.08	38.6	0.08	0.10
PM ₁₀	0.86	0.06	38.6	0.08	38.6	0.08	0.10
PM _{2.5}	0.86	0.06	38.6	0.08	38.6	0.08	0.10
NO _x	-	0.77	-	1.11	-	1.11	1.29
SO ₂	-	0.00	-	0.01	-	0.01	0.01
CO	-	0.65	-	0.93	-	0.93	1.08
VOC	*237	*237	*237	*237	*237	*237	*237
Lead	-	3.86E-06	-	5.57E-06	-	5.57E-06	6.44E-06
CO ₂ e	-	933	-	1344	-	1344	1555

	Unlimited potential emissions from the modification	Limited potential emissions from the modification	NSR/112(g) threshold for new major source	Above PSD Threshold?
Pollutant	(tpy)	(tpy)	(tpy)	(yes/no)
PM	1,355	85	250	no
PM ₁₀	1,353	83	250	no
PM _{2.5}	1,352	82	250	no
NO _x	11.1	11.1	250	no
SO ₂	0.07	0.07	250	no
CO	9.3	9.3	250	no
VOC	3,492	237	250	no
Lead	5.55E-05	5.55E-05	250	no
CO ₂ e	13,409	13,409	100,000	no

Non-Title I Emission Increase Summary

The calculation method for this increase is described on form CH-10.

The emission calculation is in lb/hr

The new units are subject to the VOC cap at the facility.

The new units are controlled by fabric filters.

Removed Units

Pollutant	EQUI 27	EQUI 30	EQUI 23	EQUI 25	EQUI 31	EQUI 61	EQUI 19
PM ₁₀	17.61	0.10	0.04	6.60	0.01	0.02	9.54
NO _x	-	1.36	0.49	-	0.13	0.30	-
SO ₂	-	0.01	0.00	-	0.00	0.00	-
CO	-	1.14	0.41	-	0.11	0.25	-
VOC	303.51	0.07	0.03	113.82	0.01	0.02	164.40
Lead	-	6.79E-06	2.45E-06	-	6.67E-07	1.48E-06	-

New Units

Pollutant	EQUI 70	EQUI 71	EQUI 73	EQUI 74	EQUI 75	EQUI 76	EQUI 77
PM ₁₀	0.20	0.01	8.80	0.02	8.80	0.02	0.02
NO _x	-	0.18	-	0.25	-	0.25	0.29
SO ₂	-	0.00	-	0.00	-	0.00	0.00
CO	-	0.15	-	0.21	-	0.21	0.25
VOC	0.51	0.01	151.76	0.01	151.76	0.01	0.02
Lead	-	8.82E-07	-	1.27E-06	-	1.27E-06	1.47E-06

Pollutant	After Change (lb/hr)	Before Change (lb/hr)	Net Change (lb/hr)	Amendment Thresholds			Type of Amendment
				Insignificant (lb/hr)	Minor (lb/hr)	Moderate (lb/hr)	
PM ₁₀	19.0	62.86	-43.83	0.855	0.855 - 3.42	3.42	minor
NO _x	2.54	4.27	-1.74	2.28	2.28 - 9.13	9.13	minor
SO ₂	0.02	0.03	-0.01	2.28	2.28 - 9.13	9.13	minor
CO	2.13	3.59	-1.46	5.7	5.70 - 22.80	22.8	minor
VOC	797.4	1075	-278	2.28	2.28 - 9.13	9.13	minor
Lead	1.27E-05	2.14E-05	-8.69E-06	0.025	0.025 - 0.11	0.11	minor

Even though the emissions summary indicates this change qualifies as an insignificant modification, the change still requires a minor amendment since there are permit requirements that needed to be amended.

EQUI 80	EQUI 81	EQUI 82	EQUI 83	EQUI 84	EQUI 85	EQUI 86	EQUI 87	EQUI 88	Total
278.52	0.13	278.52	0.13	278.52	0.13	0.05	3.56	0.06	1,355
278.52	0.13	278.52	0.13	278.52	0.13	0.05	1.71	0.06	1,353
278.52	0.13	278.52	0.13	278.52	0.13	0.05	0.17	0.06	1,352
-	1.77	-	1.77	-	1.77	0.71	-	0.80	11.10
-	0.01	-	0.01	-	0.01	0.00	-	0.00	0.07
-	1.49	-	1.49	-	1.49	0.60	-	0.67	9.33
720.08	0.10	720.08	0.10	720.08	0.10	0.04	-	0.04	3,492
-	8.86E-06	-	8.86E-06	-	8.86E-06	3.54E-06	-	3.99E-06	5.55E-05
-	2138	-	2138	-	2138	855	-	964	13,409

EQUI 80	EQUI 81	EQUI 82	EQUI 83	EQUI 84	EQUI 85	EQUI 86	EQUI 87	EQUI 88	Total
0.94	0.13	0.94	0.13	0.94	0.13	0.05	3.56	0.06	85
0.94	0.13	0.94	0.13	0.94	0.13	0.05	1.71	0.06	83
0.94	0.13	0.94	0.13	0.94	0.13	0.05	0.17	0.06	82
-	1.77	-	1.77	-	1.77	0.71	-	0.80	11.10
-	0.01	-	0.01	-	0.01	0.00	-	0.00	0.07
-	1.49	-	1.49	-	1.49	0.60	-	0.67	9.33
*237	*237	*237	*237	*237	*237	*237	-	*237	237
-	8.86E-06	-	8.86E-06	-	8.86E-06	3.54E-06	-	3.99E-06	5.55E-05
-	2138	-	2138	-	2138	855	-	964	13,409

EQUI 49	EQUI 47	EQUI 50	EQUI 48	EQUI 20	EQUI 53	EQUI 51	EQUI 54	EQUI 52	Total
0.03	9.54	0.03	0.01	9.54	0.03	9.54	0.03	0.18	62.86
0.40	-	0.40	0.16	-	0.40	-	0.40	0.22	4.27
0.00	-	0.00	0.00	-	0.00	-	0.00	0.00	0.03
0.34	-	0.34	0.14	-	0.34	-	0.34	0.18	3.59
0.02	164.40	0.02	0.01	164.40	0.02	164.40	0.02	0.01	1,075
2.02E-06	-	2.02E-06	8.09E-07	-	2.02E-06	-	2.02E-06	1.08E-06	2.14E-05

EQUI 80	EQUI 81	EQUI 82	EQUI 83	EQUI 84	EQUI 85	EQUI 86	EQUI 87	EQUI 88	Total
0.21	0.03	0.21	0.03	0.21	0.03	0.01	0.39	0.01	19.03
-	0.40	-	0.40	-	0.40	0.16	-	0.18	2.54
-	0.00	-	0.00	-	0.00	0.00	-	0.00	0.02
-	0.34	-	0.34	-	0.34	0.14	-	0.15	2.13
164.40	0.02	164.40	0.02	164.40	0.02	0.01	-	0.01	797.36
-	2.02E-06	-	2.02E-06	-	2.02E-06	8.09E-07	-	9.12E-07	0.0

McNeilus Truck & Manufacturing, Inc.

The following table lists maximum application rate, maximum material contents as applied, maximum material density as applied, and minimum transfer efficiency, for each specified spray booth at the time of permit issuance. These are worst case assumptions. All of the material contents and the density are as applied, meaning that the primer, hardeners, topcoats, and reducers used at the facility are never applied individually, they are always a mixture of at least two components (i.e. primer mixture consists of primer and hardener and topcoat mixture consists of topcoat, hardener, and reducer). Changing to a formulation that has a higher solids or VOC/HAP content, increasing the capacity of an emissions unit (except as pre-authorized in the permit), or decreasing the transfer efficiency is considered a change in method of operation that must be evaluated under Minn.R.7007.1200,subp.3, to determine if a permit amendment or notification is required.

	Max Application Rate (gal/hr/booth)	Max Solids Content as Applied (% weight)	(lb/gal)	Max VOC Content as Applied (% weight)	(lb/gal)	Max Material Density (lb/gal)	Minimum Transfer Efficiency (%)
EQUI 001							
Primer mixture	16.88	0.83	10.44	0.36	3.50	12.60	0.75
Topcoat mixture	16.88	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 002							
Primer mixture	16.88	0.83	10.44	0.36	3.50	12.60	0.75
Topcoat mixture	16.88	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 004							
Primer mixture	3.16	0.83	10.44	0.36	3.50	12.60	0.75
Topcoat mixture	3.16	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 014							
Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 015							
Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 017							
Primer mixture	33.75	0.83	10.44	0.36	3.50	12.60	0.75
Topcoat mixture	33.75	0.77	9.84	0.92	6.74	12.42	0.75

APPENDIX B

The following table lists maximum application rate, maximum material contents as applied, maximum material density as applied, and minimum transfer efficiency, for each specified spray booth at the time of permit issuance. These are worst case assumptions. All of the material contents and the density are as applied, meaning that the primer, hardeners, topcoats, and reducers used at the facility are never applied individually, they are always a mixture of at least two components (i.e. primer mixture consists of primer and hardener and topcoat mixture consists of topcoat, hardener, and reducer). Changing to a formulation that has a higher solids or VOC/HAP content, increasing the capacity of an emissions unit (except as pre-authorized in the permit), or decreasing the transfer efficiency is considered a change in method of operation that must be evaluated under Minn.R.7007.1200, subp.3, to determine if a permit amendment or notification is required.

	Max Application Rate (gal/hr/booth)	Max Solids Content as Applied (lb/gal)	Max VOC Content as Applied (lb/gal)	Max Material Density (lb/gal)	Minimum Transfer Efficiency (%)
EQUI 001	16.88	10.44	6.74	12.60	0.75
EQUI 002	16.88	10.44	6.74	12.60	0.75
EQUI 004	3.16	10.44	6.74	12.60	0.75
EQUI 014	22.50	10.44	6.74	12.60	0.75
EQUI 015	22.50	10.44	6.74	12.60	0.75
EQUI 017	33.75	10.44	6.74	12.60	0.75
EQUI 026	16.88	10.44	6.74	12.60	0.75
EQUI 028	22.50	10.44	6.74	12.60	0.75
EQUI 037	22.50	10.44	6.74	12.60	0.75
EQUI 040	22.50	10.44	6.74	12.60	0.75
EQUI 043	22.50	10.44	6.74	12.60	0.75
EQUI 070	0.08	10.44	6.74	12.60	0.75
EQUI 073	22.50	10.44	6.74	12.60	0.75
EQUI 075	22.50	10.44	6.74	12.60	0.75
EQUI 080	24.38	10.44	6.74	12.60	0.75
EQUI 082	24.38	10.44	6.74	12.60	0.75
EQUI 084	24.38	10.44	6.74	12.60	0.75

EQUI 026								
	Primer mixture	16.88	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	16.88	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 028								
	Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 037								
	Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 040								
	Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 043								
	Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 070								
	Primer mixture	0.08	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	0.08	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 073								
	Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 075								
	Primer mixture	22.50	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	22.50	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 080								
	Primer mixture	24.38	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	24.38	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 082								
	Primer mixture	24.38	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	24.38	0.77	9.84	0.92	6.74	12.42	0.75
EQUI 084								
	Primer mixture	24.38	0.83	10.44	0.36	3.50	12.60	0.75
	Topcoat mixture	24.38	0.77	9.84	0.92	6.74	12.42	0.75

McNeilus Truck & Manufacturing, Inc.

The following series of tables summarize the annual PTE at COMG 3.

COMG 3 has a VOC limit of 237 tpy and material usage limit of 338,600 gallons per year.

These two limits combine to limit VOC, particulates, and HAPs at the facility.

COMG 3 includes all VOC emitting equipment at the facility, this is every unit except the blast booth EQUI 87.

Plant Wide Clean-up Solvent Usage

	EQUI 11
	unlimited tpy
VOC	221.4
HAPs	
Toluene	10.4
Methanol	1.3
Xylene	8.8
MIBK	10.0
Total HAPs	30.5

Curing Ovens, Make-up Air Units, and Space Heaters

This makes up the curing ovens, make-up air units, and space heaters at the facility. They are natural gas fired.

In general, these units are the units in COMG 2, COMG 8, and insignificant activities.

	EQUI 32	EQUI 33	EQUI 36	EQUI 38	EQUI 39	EQUI 41	EQUI 42
	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy
VOC	0.05	0.11	0.11	0.05	0.09	0.05	0.09
PM	0.07	0.15	0.15	0.06	0.13	0.06	0.13
PM10	0.07	0.15	0.15	0.06	0.13	0.06	0.13
PM2.5	0.07	0.15	0.15	0.06	0.13	0.06	0.13
NOx	0.96	2.01	2.01	0.83	1.70	0.83	1.70
CO	0.80	1.69	1.69	0.69	1.43	0.69	1.43
SO2	0.01	0.01	0.01	0.00	0.01	0.00	0.01
CO2	1146.5	2409.0	2409.0	991.9	2040.6	991.9	2040.6
CH ₄	0.02	0.05	0.05	0.02	0.04	0.02	0.04
N ₂ O	0.02	0.04	0.04	0.02	0.04	0.02	0.04
CO ₂ e	1153	2423	2423	998	2053	998	2053
HAPs							
Lead	4.78E-06	1.00E-05	1.00E-05	4.13E-06	8.50E-06	4.13E-06	8.50E-06
Polycyclic Organic Mat	8.43E-07	1.77E-06	1.77E-06	7.29E-07	1.50E-06	7.29E-07	1.50E-06
Benzene	2.01E-05	4.22E-05	4.22E-05	1.74E-05	3.57E-05	1.74E-05	3.57E-05
Dichlorobenzene	1.15E-05	2.41E-05	2.41E-05	9.92E-06	2.04E-05	9.92E-06	2.04E-05
Formaldehyde	7.17E-04	1.51E-03	1.51E-03	6.20E-04	1.28E-03	6.20E-04	1.28E-03
Hexane	1.72E-02	3.61E-02	3.61E-02	1.49E-02	3.06E-02	1.49E-02	3.06E-02
Naphthalene	5.83E-06	1.22E-05	1.22E-05	5.04E-06	1.04E-05	5.04E-06	1.04E-05
Toluene	3.25E-05	6.83E-05	6.83E-05	2.81E-05	5.78E-05	2.81E-05	5.78E-05
Arsenic	1.91E-06	4.02E-06	4.02E-06	1.65E-06	3.40E-06	1.65E-06	3.40E-06
Beryllium	1.15E-07	2.41E-07	2.41E-07	9.92E-08	2.04E-07	9.92E-08	2.04E-07
Cadmium	1.05E-05	2.21E-05	2.21E-05	9.09E-06	1.87E-05	9.09E-06	1.87E-05
Chromium	1.34E-05	2.81E-05	2.81E-05	1.16E-05	2.38E-05	1.16E-05	2.38E-05
Cobalt	8.03E-07	1.69E-06	1.69E-06	6.94E-07	1.43E-06	6.94E-07	1.43E-06
Manganese	3.63E-06	7.63E-06	7.63E-06	3.14E-06	6.46E-06	3.14E-06	6.46E-06
Mercury	2.48E-06	5.22E-06	5.22E-06	2.15E-06	4.42E-06	2.15E-06	4.42E-06
Nickel	2.01E-05	4.22E-05	4.22E-05	1.74E-05	3.57E-05	1.74E-05	3.57E-05
Selenium	2.29E-07	4.82E-07	4.82E-07	1.98E-07	4.08E-07	1.98E-07	4.08E-07
Total HAPs	1.80E-02	3.79E-02	3.79E-02	1.56E-02	3.21E-02	1.56E-02	3.21E-02

EQUI 44	EQUI 45	EQUI 46	EQUI 58	EQUI 59	EQUI 62	EQUI 71	EQUI 74	EQUI 76	EQUI 77	EQUI 81
unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy
0.05	0.09	0.10	0.04	0.17	1.68	0.04	0.06	0.06	0.07	0.10
0.07	0.13	0.14	0.05	0.23	2.32	0.06	0.08	0.08	0.10	0.13
0.07	0.13	0.14	0.05	0.23	2.32	0.06	0.08	0.08	0.10	0.13
0.07	0.13	0.14	0.05	0.23	2.32	0.06	0.08	0.08	0.10	0.13
0.94	1.70	1.87	0.64	3.05	30.53	0.77	1.11	1.11	1.29	1.77
0.79	1.43	1.57	0.54	2.56	25.65	0.65	0.93	0.93	1.08	1.49
0.01	0.01	0.01	0.00	0.02	0.18	0.00	0.01	0.01	0.01	0.01
1133.6	2040.6	2244.6	772.9	3658.6	36637.4	927.5	1335.6	1335.6	1545.9	2125.6
0.02	0.04	0.04	0.01	0.07	0.70	0.02	0.03	0.03	0.03	0.04
0.02	0.04	0.04	0.01	0.07	0.67	0.02	0.02	0.02	0.03	0.04
1140	2053	2258	778	3680	36855	933	1344	1344	1555	2138

4.72E-06	8.50E-06	9.35E-06	3.22E-06	1.52E-05	1.53E-04	3.86E-06	5.57E-06	5.57E-06	6.44E-06	8.86E-06
8.33E-07	1.50E-06	1.65E-06	5.68E-07	2.69E-06	2.69E-05	6.82E-07	9.82E-07	9.82E-07	1.14E-06	1.56E-06
1.98E-05	3.57E-05	3.93E-05	1.35E-05	6.40E-05	6.41E-04	1.62E-05	2.34E-05	2.34E-05	2.71E-05	3.72E-05
1.13E-05	2.04E-05	2.24E-05	7.73E-06	3.66E-05	3.66E-04	9.28E-06	1.34E-05	1.34E-05	1.55E-05	2.13E-05
7.09E-04	1.28E-03	1.40E-03	4.83E-04	2.29E-03	2.29E-02	5.80E-04	8.35E-04	8.35E-04	9.66E-04	1.33E-03
1.70E-02	3.06E-02	3.37E-02	1.16E-02	5.49E-02	5.50E-01	1.39E-02	2.00E-02	2.00E-02	2.32E-02	3.19E-02
5.76E-06	1.04E-05	1.14E-05	3.93E-06	1.86E-05	1.86E-04	4.71E-06	6.79E-06	6.79E-06	7.86E-06	1.08E-05
3.21E-05	5.78E-05	6.36E-05	2.19E-05	1.04E-04	1.04E-03	2.63E-05	3.78E-05	3.78E-05	4.38E-05	6.02E-05
1.89E-06	3.40E-06	3.74E-06	1.29E-06	6.10E-06	6.11E-05	1.55E-06	2.23E-06	2.23E-06	2.58E-06	3.54E-06
1.13E-07	2.04E-07	2.24E-07	7.73E-08	3.66E-07	3.66E-06	9.28E-08	1.34E-07	1.34E-07	1.55E-07	2.13E-07
1.04E-05	1.87E-05	2.06E-05	7.09E-06	3.35E-05	3.36E-04	8.50E-06	1.22E-05	1.22E-05	1.42E-05	1.95E-05
1.32E-05	2.38E-05	2.62E-05	9.02E-06	4.27E-05	4.27E-04	1.08E-05	1.56E-05	1.56E-05	1.80E-05	2.48E-05
7.94E-07	1.43E-06	1.57E-06	5.41E-07	2.56E-06	2.56E-05	6.49E-07	9.35E-07	9.35E-07	1.08E-06	1.49E-06
3.59E-06	6.46E-06	7.11E-06	2.45E-06	1.16E-05	1.16E-04	2.94E-06	4.23E-06	4.23E-06	4.90E-06	6.73E-06
2.46E-06	4.42E-06	4.86E-06	1.67E-06	7.93E-06	7.94E-05	2.01E-06	2.89E-06	2.89E-06	3.35E-06	4.61E-06
1.98E-05	3.57E-05	3.93E-05	1.35E-05	6.40E-05	6.41E-04	1.62E-05	2.34E-05	2.34E-05	2.71E-05	3.72E-05
2.27E-07	4.08E-07	4.49E-07	1.55E-07	7.32E-07	7.33E-06	1.86E-07	2.67E-07	2.67E-07	3.09E-07	4.25E-07
1.78E-02	3.21E-02	3.53E-02	1.22E-02	5.76E-02	5.77E-01	1.46E-02	2.10E-02	2.10E-02	2.43E-02	3.35E-02

EQUI 83	EQUI 85	EQUI 86	EQUI 88	EQUI 91	EQUI 92	EQUI 93	Total
unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy
0.10	0.10	0.04	0.04	0.13	0.04	0.08	3.55
0.13	0.13	0.05	0.06	0.18	0.05	0.12	4.90
0.13	0.13	0.05	0.06	0.18	0.05	0.12	4.90
0.13	0.13	0.05	0.06	0.18	0.05	0.12	4.90
1.77	1.77	0.71	0.80	2.36	0.71	1.53	64.46
1.49	1.49	0.60	0.67	1.98	0.60	1.29	54.16
0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.39
2125.6	2125.6	850.2	958.4	2834.1	850.2	1842.2	77374
0.04	0.04	0.02	0.02	0.05	0.02	0.04	1.48
0.04	0.04	0.02	0.02	0.05	0.02	0.03	1.42
2138	2138	855	964	2851	855	1853	77834
8.86E-06	8.86E-06	3.54E-06	3.99E-06	1.18E-05	3.54E-06	7.68E-06	3.22E-04
1.56E-06	1.56E-06	6.25E-07	7.04E-07	2.08E-06	6.25E-07	1.35E-06	5.69E-05
3.72E-05	3.72E-05	1.49E-05	1.68E-05	4.96E-05	1.49E-05	3.22E-05	1.35E-03
2.13E-05	2.13E-05	8.50E-06	9.58E-06	2.83E-05	8.50E-06	1.84E-05	7.74E-04
1.33E-03	1.33E-03	5.31E-04	5.99E-04	1.77E-03	5.31E-04	1.15E-03	4.84E-02
3.19E-02	3.19E-02	1.28E-02	1.44E-02	4.25E-02	1.28E-02	2.76E-02	1.16E+00
1.08E-05	1.08E-05	4.32E-06	4.87E-06	1.44E-05	4.32E-06	9.36E-06	3.93E-04
6.02E-05	6.02E-05	2.41E-05	2.72E-05	8.03E-05	2.41E-05	5.22E-05	2.19E-03
3.54E-06	3.54E-06	1.42E-06	1.60E-06	4.72E-06	1.42E-06	3.07E-06	1.29E-04
2.13E-07	2.13E-07	8.50E-08	9.58E-08	2.83E-07	8.50E-08	1.84E-07	7.74E-06
1.95E-05	1.95E-05	7.79E-06	8.79E-06	2.60E-05	7.79E-06	1.69E-05	7.09E-04
2.48E-05	2.48E-05	9.92E-06	1.12E-05	3.31E-05	9.92E-06	2.15E-05	9.03E-04
1.49E-06	1.49E-06	5.95E-07	6.71E-07	1.98E-06	5.95E-07	1.29E-06	5.42E-05
6.73E-06	6.73E-06	2.69E-06	3.04E-06	8.97E-06	2.69E-06	5.83E-06	2.45E-04
4.61E-06	4.61E-06	1.84E-06	2.08E-06	6.14E-06	1.84E-06	3.99E-06	1.68E-04
3.72E-05	3.72E-05	1.49E-05	1.68E-05	4.96E-05	1.49E-05	3.22E-05	1.35E-03
4.25E-07	4.25E-07	1.70E-07	1.92E-07	5.67E-07	1.70E-07	3.68E-07	1.55E-05
3.35E-02	3.35E-02	1.34E-02	1.51E-02	4.46E-02	1.34E-02	2.90E-02	1.22

Emergency Generators

These are natural gas fired emergency generators

	EQUI 72	EQUI 89	EQUI 90	Total
	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy
NOx	1.70E-01	2.03E-01	1.70E-01	5.43E-01
CO	3.40E-01	4.06E-01	3.40E-01	1.09E+00
PM	6.36E-03	6.26E-03	6.36E-03	1.90E-02
PM10	6.36E-03	6.26E-03	6.36E-03	1.90E-02
PM2.5	6.36E-03	6.26E-03	6.36E-03	1.90E-02
VOC	8.49E-02	1.02E-01	8.49E-02	2.71E-01
SO2	1.93E-04	1.90E-04	1.93E-04	5.75E-04
CO2	3.60E+01	3.55E+01	3.60E+01	1.08E+02
CH ₄	7.22E-04	7.11E-04	7.22E-04	2.16E-03
N ₂ O	7.22E-05	7.11E-05	7.22E-05	2.16E-04
CO ₂ e	3.61E+01	3.55E+01	3.61E+01	1.08E+02
HAPs				
1,1,2,2-Tetrachloroethane	8.29E-06	8.16E-06	8.29E-06	2.47E-05
1,1,2-Trichloroethane	5.01E-06	4.93E-06	5.01E-06	1.50E-05
1,3-Butadiene	2.17E-04	2.14E-04	2.17E-04	6.48E-04
1,3-Dichloropropene	4.16E-06	4.10E-06	4.16E-06	1.24E-05
Acetaldehyde	9.14E-04	9.00E-04	9.14E-04	2.73E-03
Acrolein	8.61E-04	8.48E-04	8.61E-04	2.57E-03
Benzene	5.17E-04	5.10E-04	5.17E-04	1.54E-03
Carbon Tetrachloride	5.80E-06	5.71E-06	5.80E-06	1.73E-05
Chlorobenzene	4.22E-06	4.16E-06	4.22E-06	1.26E-05
Chloroform	4.49E-06	4.42E-06	4.49E-06	1.34E-05
Ethylbenzene	8.12E-06	8.00E-06	8.12E-06	2.42E-05
Ethylene Dibromide	6.98E-06	6.87E-06	6.98E-06	2.08E-05
Formaldehyde	6.71E-03	6.61E-03	6.71E-03	2.00E-02
Methylene Chloride	1.35E-05	1.33E-05	1.35E-05	4.03E-05
Naphthalene	3.18E-05	3.13E-05	3.18E-05	9.49E-05
POM	4.62E-05	4.55E-05	4.62E-05	1.38E-04
Styrene	3.90E-06	3.84E-06	3.90E-06	1.16E-05
Toluene	1.83E-04	1.80E-04	1.83E-04	5.45E-04
Vinyl Chloride	2.35E-06	2.32E-06	2.35E-06	7.02E-06
Xylene	6.39E-05	6.29E-05	6.39E-05	1.91E-04

Unlimited Paint Booths

These are the paint booths in COMG 1.

	EQUI 1	EQUI 2	EQUI 4	EQUI 14	EQUI 15	EQUI 17	EQUI 26
	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy
VOC	498.5	498.5	93.3	664.7	664.7	997.0	498.5
PM	192.8	192.8	36.1	257.1	257.1	385.6	192.8
PM10	192.8	192.8	36.1	257.1	257.1	385.6	192.8
PM2.5	192.8	192.8	36.1	257.1	257.1	385.6	192.8
HAPs							
Formaldehyde	0.19	0.19	0.04	0.25	0.25	0.38	0.19
Methanol	0.38	0.38	0.07	0.50	0.50	0.75	0.38
Cumene	2.19	2.19	0.41	2.92	2.92	4.38	2.19
Ethylbenzene	5.66	5.66	1.06	7.54	7.54	11.32	5.66
Methyl Isobutyl Ketone	43.6	43.6	8.2	58.2	58.2	87.3	43.6
Toluene	0.54	0.54	0.10	0.72	0.72	1.08	0.54
Hexamethylene-1,6-Diisocyanate	0.44	0.44	0.08	0.59	0.59	0.89	0.44
Xylene	24.8	24.8	4.6	33.0	33.0	49.5	24.8
Glycol Ethers	121.4	121.4	22.7	161.9	161.9	242.8	121.4
Total HAPs	199.23	199.23	37.30	265.64	265.64	398.46	199.23

EQUI 28	EQUI 37	EQUI 40	EQUI 43	EQUI 70	EQUI 73	EQUI 75	EQUI 80	EQUI 82	EQUI 84	Total
unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy	unlimited tpy
664.7	664.7	664.7	664.7	2.2	664.7	664.7	720.1	720.1	720.1	10,066
257.1	257.1	257.1	257.1	0.9	257.1	257.1	278.5	278.5	278.5	3,893
257.1	257.1	257.1	257.1	0.9	257.1	257.1	278.5	278.5	278.5	3,893
257.1	257.1	257.1	257.1	0.9	257.1	257.1	278.5	278.5	278.5	3,893
0.25	0.25	0.25	0.25	0.00	0.25	0.25	0.27	0.27	0.27	3.8
0.50	0.50	0.50	0.50	0.00	0.50	0.50	0.54	0.54	0.54	7.6
2.92	2.92	2.92	2.92	0.01	2.92	2.92	3.16	3.16	3.16	44.2
7.54	7.54	7.54	7.54	0.03	7.54	7.54	8.17	8.17	8.17	114.2
58.2	58.2	58.2	58.2	0.2	58.2	58.2	63.0	63.0	63.0	881.2
0.72	0.72	0.72	0.72	0.00	0.72	0.72	0.78	0.78	0.78	10.9
0.59	0.59	0.59	0.59	0.00	0.59	0.59	0.64	0.64	0.64	9.0
33.0	33.0	33.0	33.0	0.1	33.0	33.0	35.8	35.8	35.8	500.1
161.9	161.9	161.9	161.9	0.5	161.9	161.9	175.4	175.4	175.4	2,452
265.64	265.64	265.64	265.64	0.89	265.64	265.64	287.78	287.78	287.78	4022.77

Limited Paint Booths

This table summarizes the emissions based on the 338,600 gal/year limit.

VOC is based on the maximum material as applied, as shown in permit appendix B.

Particulates are based on the maximum material as applied, as shown in permit appendix B.

Particulates include a transfer efficiency and control efficiency in the calculations.

HAPs are based on the maximum material as applied, as calculated in individual SI tabs in this spreadsheet.

Note that in general, VOC and solids content are inverse of each other. Meaning higher VOC content paint has lower solids contents

When using a maximum solids content (10.44 lb/gal), VOC content is near 1.38 lb/gal, which gives an annual VOC value of 233 tpy

	Material Throughput	Max Material Content (as applied)	Transfer Efficiency	Control Efficiency	Limited Annual PTE
	gal/yr	lb/gal	%	%	tpy
VOC	338,600	6.74	75	-	1141.1
PM	338,600	10.44	75	85	66.3
PM10	338,600	10.44	75	85	66.3
PM2.5	338,600	10.44	75	85	66.3
HAPs					
Formaldehyde	338,600	0.0033	75	-	0.6
Methanol	338,600	0.0066	75	-	1.1
Cumene	338,600	0.0319	75	-	5.4
Ethylbenzene	338,600	0.076	75	-	12.9
Methyl Isobutyl Ketone	338,600	0.588	75	-	99.5
Toluene	338,600	0.0076	75	-	1.3
Hexamethylene-1,6-Di	338,600	0.0066	75	-	1.1
Xylene	338,600	0.333	75	-	56.4
Glycol Ethers	338,600	1.645	75	-	278.5
Total HAPs					456.8

Limited Emissions Summary for COMG 3

This final table shows PTE values for COMG 3.

The facility has a VOC cap of 237 tpy.

The facility tracks VOC emissions based on solvent, ovens, heaters, and paint usage.

As noted above, solids and VOC content depends on the paint mixture.

By limiting the VOC and material usage, particulates will remain below the PSD thresholds.

The 'COMG 3 Limited' column sets a capped value of 237 tpy for VOC.

The HAPs emitted are also VOCs, which caps HAP usage to 237 tpy as well.

Since glycol ethers are above 237 tpy, the value for these HAPs are set to 237 tpy.

	Plant Wide Clean-up Solvent Usage	Curing Ovens, Make-up Air Units, and Space Heaters	Emergency Generators	Paint Booths Unlimited	Limited Paint Booths Material Throughput	Unlimited Summary	Limited Summary	COMG 3 Limited
	tpy	tpy	tpy	tpy	tpy	tpy	tpy	tpy
VOC	221.42	3.55	2.71E-01	10,066	1,141	10,291	1,366	237
PM	0	4.90	1.90E-02	3,893	66	3,898	71	71
PM10	0	4.90	1.90E-02	3,893	66	3,898	71	71
PM2.5	0	4.90	1.90E-02	3,893	66	3,898	71	71
NOx	0	64.46	0.54	0.00	0	65.01	65.01	65.01
CO	0	54.16	1.09	0	0	55.25	55.25	55.25
SO2	0	0.39	5.75E-04	0	0	3.87E-01	3.87E-01	0.39
CO2	0	77374	108	0	0	77,481	77,481	77,481
CH4	0	1.48	2.16E-03	0	0	1.49E+00	1.49E+00	1.49
N2O	0	1.42	2.16E-04	0	0	1.42E+00	1.42E+00	1.42
CO2e	0	77834	108	0	0	77,941	77,941	77,941
HAPs								
Formaldehyde	0	4.84E-02	2.00E-02	3.8	0.6	3.9	0.63	0.6
Methanol	1.28	0	0.0	7.6	1.1	8.9	2.39	2.4
Cumene	0	0	0.0	44.2	5.4	44.2	5.40	5.4
Ethylbenzene	0	0	2.42E-05	114.2	13	114.2	12.87	12.9
Methyl Isobutyl Ketone	0	0	0.0	881.2	99.5	881.2	99.55	99.5
Toluene*	10.4	0	0.0	10.9	1.3	21.3	11.67	11.7
Hexamethylene-1,6-Di	0	0	0.0	9.0	1.1	9.0	1.1	1.1

Xylene *	8.83	0	0.0	500.1	56.4	508.9	65.20	65.2
Glycol Ethers	0	0	0.0	2,451.8	278	2,451.8	278.50	237
MIBK	10.0	0	0	0	0	10.0	9.97	10.0
Lead	0	3.22E-04	0	0	0	3.22E-04	3.22E-04	3.22E-04
Polycyclic Organic Mat	0	5.69E-05	0	0	0	1.95E-04	1.95E-04	1.95E-04
Benzene	0	1.35E-03	1.54E-03	0	0	2.90E-03	2.90E-03	2.90E-03
Dichlorobenzene	0	7.74E-04	0	0	0	7.74E-04	7.74E-04	7.74E-04
Hexane	0	1.16	0	0	0	1.2	1.16	1.16
Naphthalene*	0	3.93E-04	0	0	0	4.88E-04	4.88E-04	4.88E-04
Toluene*	0	2.19E-03	0	0	0	2.13E+01	1.17E+01	1.17E+01
Arsenic	0	1.29E-04	0	0	0	1.29E-04	1.29E-04	1.29E-04
Beryllium	0	7.74E-06	0	0	0	7.74E-06	7.74E-06	7.74E-06
Cadmium	0	7.09E-04	0	0	0	7.09E-04	7.09E-04	7.09E-04
Chromium	0	9.03E-04	0	0	0	9.03E-04	9.03E-04	9.03E-04
Cobalt	0	5.42E-05	0	0	0	5.42E-05	5.42E-05	5.42E-05
Manganese	0	2.45E-04	0	0	0	2.45E-04	2.45E-04	2.45E-04
Mercury	0	1.68E-04	0	0	0	1.68E-04	1.68E-04	1.68E-04
Nickel	0	1.35E-03	0	0	0	1.35E-03	1.35E-03	1.35E-03
Selenium	0	1.55E-05	0	0	0	1.55E-05	1.55E-05	1.55E-05
1,1,2,2-Tetrachloroetha	0	0	2.47E-05	0	0	2.47E-05	2.47E-05	2.47E-05
1,1,2-Trichloroethane	0	0	1.50E-05	0	0	1.50E-05	1.50E-05	1.50E-05
1,3-Butadiene	0	0	6.48E-04	0	0	6.48E-04	6.48E-04	6.48E-04
1,3-Dichloropropene	0	0	1.24E-05	0	0	1.24E-05	1.24E-05	1.24E-05
Acetaldehyde	0	0	2.73E-03	0	0	2.73E-03	2.73E-03	2.73E-03
Acrolein	0	0	2.57E-03	0	0	2.57E-03	2.57E-03	2.57E-03
Carbon Tetrachloride	0	0	1.73E-05	0	0	1.73E-05	1.73E-05	1.73E-05
Chlorobenzene	0	0	1.26E-05	0	0	1.26E-05	1.26E-05	1.26E-05
Chloroform	0	0	1.34E-05	0	0	1.34E-05	1.34E-05	1.34E-05
Ethylene Dibromide	0	0	2.08E-05	0	0	2.08E-05	2.08E-05	2.08E-05
Methylene Chloride	0	0	4.03E-05	0	0	4.03E-05	4.03E-05	4.03E-05
Naphthalene*	0	0	9.49E-05	0	0	4.88E-04	4.88E-04	4.88E-04
POM*	0	0	1.38E-04	0	0	1.95E-04	1.95E-04	1.95E-04
Styrene	0	0	1.16E-05	0	0	1.16E-05	1.16E-05	1.16E-05
Toluene*	0	0	5.45E-04	0	0	2.13E+01	1.17E+01	1.17E+01
Vinyl Chloride	0	0	7.02E-06	0	0	7.02E-06	7.02E-06	7.02E-06
Xylene*	0	0	1.91E-04	0	0	5.09E+02	6.52E+01	6.52E+01
Total HAPs								237

*POM, Napthalene, Toluene, and Xylene have multiple rows

McNeilus Truck and Manufacturing, Inc.
EQUI1 - STRU28 (same as STRU29)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate (lbs/hour)	Emission Rate (lbs/hour)
253.1	0.997

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
10,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
70.0

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume (dscf/min)	Emission Rate (gr/dscf)	Emission Rate (lbs/hour)
9,962	0.089	7.62

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.089 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
0.997	7.62	25.62	7.62	6.60	yes

McNeilus Truck and Manufacturing, Inc.
EQUI2 - STRU57 (same as STRU58-60)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
253.1

Emission Rate
(lbs/hour)
0.997

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
12,190

Percent Moisture
0.000

Outlet Temperature (deg. F)
70.00

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
12,144

Emission Rate
(gr/dscf)
0.084

Emission Rate
(lbs/hour)
8.71

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.084 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
0.997	8.71	31.23	8.71	6.60	yes

McNeilus Truck and Manufacturing, Inc.
EQUI4 - STRU67
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
47.4

Emission Rate
(lbs/hour)
0.353

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
25,600

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
25,503

Emission Rate
(gr/dscf)
0.066

Emission Rate
(lbs/hour)
14.38

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.066 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
0.353	14.38	65.58	14.38	1.24	yes

McNeilus Truck and Manufacturing, Inc.
EQUI14 - STRU18 (same for STRU19)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
38,500

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
38,355

Emission Rate
(gr/dscf)
0.058

Emission Rate
(lbs/hour)
18.94

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.058 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	18.94	98.63	18.94	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI15 - STRU22 (same for STRU23)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
44,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
43,834

Emission Rate
(gr/dscf)
0.055

Emission Rate
(lbs/hour)
20.73

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.055 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	20.73	112.72	20.73	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI17 - STRU27 (same for STRU30)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
506.3

Emission Rate
(lbs/hour)
1.532

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
10,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
9,962

Emission Rate
(gr/dscf)
0.089

Emission Rate
(lbs/hour)
7.62

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.089 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.532	7.62	25.62	7.62	1.98	yes

McNeilus Truck and Manufacturing, Inc.
EQUI26 - STRU8
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
253.1

Emission Rate
(lbs/hour)
0.997

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
19,290

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
19,217

Emission Rate
(gr/dscf)
0.072

Emission Rate
(lbs/hour)
11.87

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.072 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
0.997	11.87	49.42	11.87	6.60	yes

McNeilus Truck and Manufacturing, Inc.
EQUI28 - STRU13 (same for STRU14)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
38,500

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
38,355

Emission Rate
(gr/dscf)
0.058

Emission Rate
(lbs/hour)
18.94

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.058 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	18.94	98.63	18.94	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI37 - STRU15 (same for STRU16)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
18,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
17,932

Emission Rate
(gr/dscf)
0.074

Emission Rate
(lbs/hour)
11.33

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.074 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	11.33	46.11	11.33	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI40 - STRU20 (same for STRU21)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
18,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
17,932

Emission Rate
(gr/dscf)
0.074

Emission Rate
(lbs/hour)
11.33

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.074 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	11.33	46.11	11.33	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI43 -STRU24 (same for STRU25)
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 1.000

Source Gas Volume (acfm)
18,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
17,932

Emission Rate
(gr/dscf)
0.074

Emission Rate
(lbs/hour)
11.33

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.074 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	11.33	46.11	11.33	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI70 - STRU85
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate (lbs/hour)	Emission Rate (lbs/hour)
1.1	0.035

Table 2

EMISSION POINT 2.000

Source Gas Volume (acfm)
18,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume (dscf/min)	Emission Rate (gr/dscf)	Emission Rate (lbs/hour)
17,932	0.074	11.33

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.074 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
0.035	11.33	46.11	11.33	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI73 - STRU87/STRU88
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate (lbs/hour)	Emission Rate (lbs/hour)
337.5	1.191

Table 2

EMISSION POINT 2.000

Source Gas Volume (acfm)
16,037

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume (dscf/min)	Emission Rate (gr/dscf)	Emission Rate (lbs/hour)
15,977	0.077	10.48

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.077 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	10.48	41.08	10.48	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI75 - STRU89/STRU90
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
337.5

Emission Rate
(lbs/hour)
1.191

Table 2

EMISSION POINT 2.000

Source Gas Volume (acfm)
16,037

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
15,977

Emission Rate
(gr/dscf)
0.077

Emission Rate
(lbs/hour)
10.48

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.077 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.191	10.48	41.08	10.48	8.80	yes

McNeilus Truck and Manufacturing, Inc.
EQUI80 - STRU95/STRU96
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
365.6

Emission Rate
(lbs/hour)
1.252

Table 2

EMISSION POINT 2.000

Source Gas Volume (acfm)
12,190

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
12,144

Emission Rate
(gr/dscf)
0.084

Emission Rate
(lbs/hour)
8.71

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.084 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.252	8.71	31.23	8.71	0.21	yes

McNeilus Truck and Manufacturing, Inc.
EQUI82 - STRU97/STRU98
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
365.6

Emission Rate
(lbs/hour)
1.252

Table 2

EMISSION POINT 2.000

Source Gas Volume (acfm)
12,190

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
12,144

Emission Rate
(gr/dscf)
0.084

Emission Rate
(lbs/hour)
8.71

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.084 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.252	8.71	31.23	8.71	0.21	yes

McNeilus Truck and Manufacturing, Inc.
EQUI84 - STRU99/STRU100
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate
(lbs/hour)
365.6

Emission Rate
(lbs/hour)
1.252

Table 2

EMISSION POINT 2.000

Source Gas Volume (acfm)
12,190

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume
(dscf/min)
12,144

Emission Rate
(gr/dscf)
0.084

Emission Rate
(lbs/hour)
8.71

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.084 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)

Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
1.252	8.71	31.23	8.71	0.21	yes

McNeilus Truck and Manufacturing, Inc.
EQUI87 - STRU102
INDUSTRIAL PROCESS EQUIPMENT SPREADSHEET

This spreadsheet calculates allowable particulate emission rates based on Minnesota Rules parts 7011.0730 (Table 1) and 7011.0735 (Table 2).

Flow rate in standard cubic feet per minute (scfm) is calculated using the ideal gas law and the assumptions of 68 deg. F for standard temperature and 14.78 psia for standard pressure.

Table 1

Emission Point: 1.000

Process Weight Rate (lbs/hour)	Emission Rate (lbs/hour)
30.09	0.266

Table 2

EMISSION POIN 2.000

Source Gas Volume (acfm)
9,000

Percent Moisture
0.000

Outlet Temperature (deg. F)
69.998

Outlet Gauge Pressure (psig)
0.000

Source Gas Volume (dscf/min)	Emission Rate (gr/dscf)	Emission Rate (lbs/hour)
8,966	0.092	7.092

Emission Limit
(based on Minn. R. 7011.0715, subp. 1(A)): 0.092 gr/dscf

IPER Limit Summary Minn. R. 7011.0715, subp. 1(A)					
Table 1: Process Weight Limit (7011.0730)	Table 2: Gas Volume Limit (7011.0735)	Max Allowable (0.30 gr/dscf)	IPER Limit	Emission Rate	Complies?
lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	(yes/no)
0.266	7.09	23.06	7.09	0.81	yes

McNeilus Truck & Manufacturing, Inc.

EQUI1 - Refuse Line Paint Booth

TREA 1 - Mat or Panel Filter (Refuse Line Paint Booth)

Filter Control Eff.: PM, PM₁₀, and PM_{2.5} = 85% 85.0% 85.0%

STRU 28: Refuse Line Paint Booth

STRU 29: Refuse Line Paint Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	18
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	18
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	18
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	18
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	18
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	18
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	18
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	18
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	18
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	18
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	18
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	18
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	18
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	18
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	18
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	18
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	18
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	18
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	18
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	18
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	18
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	18
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	18
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	18
480972	Autocoat BT Toner B610	Topcoat	61%	2	18
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	18
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	18
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	18
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	18
509953	Autocoat BT Toner B627	Topcoat	61%	2	18
509957	Autocoat BT Toner B632	Topcoat	61%	2	18
509958	Autocoat BT Toner B649	Topcoat	61%	2	18
509959	Autocoat BT Toner B653	Topcoat	61%	2	18
509981	Autocoat BT Toner B664	Topcoat	61%	2	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	18
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	18
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	18
391191	Exempt Reducer	Reducer	15%	2	18
480460	AT105 Bus Reducer SRA	Reducer	15%	2	18
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	18
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	18
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	18
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
16.88	12.93	75%	20.50%	2.65	29.97	131.26	COMG 003
16.88	14.33	75%	17.93%	2.57	29.06	127.27	COMG 003
16.88	7.69	75%	67.90%	5.22	29.08	127.36	COMG 003
16.88	7.69	75%	67.90%	5.22	29.08	127.36	COMG 003
16.88	9.10	75%	15.20%	1.38	7.70	33.74	COMG 003
16.88	12.74	75%	21.11%	2.69	27.69	121.28	COMG 003
16.88	12.74	75%	21.11%	2.69	27.69	121.28	COMG 003
16.88	8.60	75%	36.40%	3.13	32.22	141.14	COMG 003
16.88	8.81	75%	33.60%	2.96	30.47	133.46	COMG 003
16.88	8.98	75%	35.80%	3.21	33.09	144.95	COMG 003
16.88	10.48	75%	30.50%	3.20	32.90	144.11	COMG 003
16.88	9.66	75%	32.71%	3.16	32.53	142.47	COMG 003
16.88	8.80	75%	35.23%	3.10	31.91	139.77	COMG 003
16.88	8.57	75%	36.70%	3.15	32.38	141.81	COMG 003
16.88	9.37	75%	33.50%	3.14	32.31	141.52	COMG 003
16.88	8.15	75%	47.98%	3.91	40.25	176.29	COMG 003
16.88	8.11	75%	54.50%	4.42	45.50	199.28	COMG 003
16.88	8.16	75%	44.49%	3.63	37.37	163.66	COMG 003
16.88	10.78	75%	30.80%	3.32	34.18	149.69	COMG 003
16.88	12.48	75%	26.10%	3.26	33.53	146.86	COMG 003
16.88	7.22	75%	100.20%	7.23	74.47	326.18	COMG 003
16.88	9.51	75%	34.38%	3.27	33.66	147.43	COMG 003
16.88	9.50	75%	34.32%	3.26	33.56	146.98	COMG 003
16.88	9.00	75%	37.00%	3.33	34.28	150.14	COMG 003
16.88	12.45	75%	24.58%	3.06	31.50	137.97	COMG 003
16.88	15.00	75%	17.40%	2.61	26.87	117.68	COMG 003
16.88	9.00	75%	35.70%	3.21	33.07	144.86	COMG 003
16.88	10.21	75%	44.86%	4.58	47.15	206.50	COMG 003
16.88	11.85	75%	27.51%	3.26	33.56	146.98	COMG 003
16.88	12.11	75%	27.00%	3.27	33.66	147.42	COMG 003
16.88	8.95	75%	33.63%	3.01	30.98	135.71	COMG 003
16.88	9.31	75%	33.70%	3.14	32.30	141.46	COMG 003
16.88	12.14	75%	24.88%	3.02	31.09	136.16	COMG 003
16.88	8.82	75%	35.90%	3.17	32.59	142.76	COMG 003
16.88	8.81	75%	34.40%	3.03	31.20	136.64	COMG 003
16.88	7.69	75%	67.90%	5.22	21.15	92.62	COMG 003
16.88	7.69	75%	67.90%	5.22	21.15	92.62	COMG 003
16.88	9.10	75%	15.20%	1.38	5.60	24.54	COMG 003
16.88	7.19	75%	100.00%	7.19	18.20	79.71	COMG 003
16.88	7.25	75%	95.86%	6.95	17.59	77.05	COMG 003
16.88	6.89	75%	100.00%	6.89	17.44	76.39	COMG 003
16.88	6.86	75%	90.00%	6.17	15.63	68.45	COMG 003
16.88	7.07	75%	98.50%	6.96	17.63	77.21	COMG 003
					113.82	498.52	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	29.13	127.60	4.37	19.14	79.71%	10.31	29.13
82.10%	11.76	33.25	145.65	4.99	21.85	82.10%	11.76	33.25
32.30%	2.48	3.46	15.15	0.52	2.27	32.30%	2.48	3.46
32.30%	2.48	3.46	15.15	0.52	2.27	32.30%	2.48	3.46
85.00%	7.74	10.77	47.17	1.62	7.07	85.00%	7.74	10.77
79.00%	10.06	25.90	113.44	3.89	17.02	79.00%	10.06	25.90
79.00%	10.06	25.90	113.44	3.89	17.02	79.00%	10.06	25.90
64.00%	5.50	14.16	62.04	2.12	9.31	64.00%	5.50	14.16
66.50%	5.86	15.08	66.04	2.26	9.91	66.50%	5.86	15.08
64.30%	5.77	14.86	65.08	2.23	9.76	64.30%	5.77	14.86
70.00%	7.34	18.88	82.69	2.83	12.40	70.00%	7.34	18.88
67.40%	6.51	16.76	73.39	2.51	11.01	67.40%	6.51	16.76
65.00%	5.72	14.72	64.47	2.21	9.67	65.00%	5.72	14.72
63.30%	5.42	13.96	61.15	2.09	9.17	63.30%	5.42	13.96
67.00%	6.28	16.16	70.76	2.42	10.61	67.00%	6.28	16.16
52.00%	4.24	10.91	47.77	1.64	7.17	52.00%	4.24	10.91
46.00%	3.73	9.60	42.05	1.44	6.31	46.00%	3.73	9.60
55.00%	4.49	11.55	50.59	1.73	7.59	55.00%	4.49	11.55
69.00%	7.44	19.14	83.84	2.87	12.58	69.00%	7.44	19.14
74.10%	9.25	23.80	104.24	3.57	15.64	74.10%	9.25	23.80
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	16.06	70.34	2.41	10.55	65.62%	6.24	16.06
66.00%	6.27	16.14	70.67	2.42	10.60	66.00%	6.27	16.14
63.00%	5.67	14.59	63.91	2.19	9.59	63.00%	5.67	14.59
75.42%	9.39	24.16	105.84	3.62	15.88	75.42%	9.39	24.16
83.00%	12.45	32.04	140.33	4.81	21.05	83.00%	12.45	32.04
64.00%	5.76	14.82	64.92	2.22	9.74	64.00%	5.76	14.82
55.20%	5.64	14.50	63.53	2.18	9.53	55.20%	5.64	14.50
73.00%	8.65	22.26	97.51	3.34	14.63	73.00%	8.65	22.26
73.00%	8.84	22.75	99.64	3.41	14.95	73.00%	8.84	22.75
66.40%	5.94	15.29	66.99	2.29	10.05	66.40%	5.94	15.29
66.20%	6.16	15.86	69.47	2.38	10.42	66.20%	6.16	15.86
75.20%	9.13	23.49	102.90	3.52	15.44	75.20%	9.13	23.49
64.20%	5.66	14.57	63.83	2.19	9.57	64.20%	5.66	14.57
66.00%	5.81	14.96	65.54	2.24	9.83	66.00%	5.81	14.96
32.30%	2.48	2.51	11.02	0.38	1.65	32.30%	2.48	2.51
32.30%	2.48	2.51	11.02	0.38	1.65	32.30%	2.48	2.51
85.00%	7.74	7.83	34.30	1.17	5.15	85.00%	7.74	7.83
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.19	0.84	0.03	0.13	4.20%	0.30	0.19
37.50%	2.58	1.64	7.16	0.25	1.07	37.50%	2.58	1.64
10.00%	0.69	0.43	1.90	0.07	0.29	10.00%	0.69	0.43
2.00%	0.14	0.09	0.39	0.01	0.06	2.00%	0.14	0.09
		44.02	192.82	6.60	COMG 003			44.02

volatile			volatile						
PM _{2.5}	PM _{2.5}	PM _{2.5}	Formaldehyde CAS# 50-00-0					Meth	
Uncontrolled	Limited	Limited	Uncontrolled Uncontrolled Limited						
(ton/yr)	(lb/hr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
127.60	4.37	19.14	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
145.65	4.99	21.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
15.15	0.52	2.27	0.10%	0.01	0.04	0.19	0.19	0.20%	0.02
15.15	0.52	2.27	0.10%	0.01	0.04	0.19	0.19	0.20%	0.02
47.17	1.62	7.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
113.44	3.89	17.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
113.44	3.89	17.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
62.04	2.12	9.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
66.04	2.26	9.91	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
65.08	2.23	9.76	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.69	2.83	12.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
73.39	2.51	11.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
64.47	2.21	9.67	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
61.15	2.09	9.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.76	2.42	10.61	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
47.77	1.64	7.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
42.05	1.44	6.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
50.59	1.73	7.59	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
83.84	2.87	12.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
104.24	3.57	15.64	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.34	2.41	10.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.67	2.42	10.60	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.91	2.19	9.59	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
105.84	3.62	15.88	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
140.33	4.81	21.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
64.92	2.22	9.74	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.53	2.18	9.53	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.51	3.34	14.63	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
99.64	3.41	14.95	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
66.99	2.29	10.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
69.47	2.38	10.42	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
102.90	3.52	15.44	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.83	2.19	9.57	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
65.54	2.24	9.83	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.02	0.38	1.65	0.10%	0.01	0.03	0.14	0.14	0.20%	0.02
11.02	0.38	1.65	0.10%	0.01	0.03	0.14	0.14	0.20%	0.02
34.30	1.17	5.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.84	0.03	0.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
7.16	0.25	1.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.90	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.39	0.01	0.06	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
192.82	6.60	COMG 003	0.00	0.04	0.19	COMG 003	0.01		

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene CAS# 100-97-6	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.09	0.38	0.38	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.09	0.38	0.38	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.18	0.78	0.78	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.79	0.79	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.95	0.95	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.10	0.44	0.44	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.79	0.79	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.77	0.77	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.84	0.84	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.25	1.10	1.10	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.25	1.10	1.10	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.17	0.74	0.74	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.11	0.49	0.49	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.56	0.56	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.37	1.63	1.63	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.20	0.86	0.86	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.28	1.22	1.22	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.15	0.68	0.68	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.11	0.46	0.46	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.12	0.53	0.53	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.12	0.55	0.55	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.84	0.84	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.36	1.59	1.59	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.36	1.59	1.59	0.00%	0.00
0.06	0.27	0.27	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.06	0.27	0.27	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.13	0.56	0.56	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.09	0.38	COMG 003		0.03	0.50	2.19	COMG 003		0.08

volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.44	1.92	1.92	4.50%	0.58	6.58	28.81	28.81
0.65	2.84	2.84	3.60%	0.52	5.83	25.55	25.55
0.98	4.31	4.31	38.90%	2.99	16.66	72.96	72.96
0.98	4.31	4.31	38.90%	2.99	16.66	72.96	72.96
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.31	5.74	5.74	6.70%	0.85	8.79	38.49	38.49
1.31	5.74	5.74	6.70%	0.85	8.79	38.49	38.49
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.37	1.62	1.62
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.42	0.42	0.00%	0.00	0.00	0.00	0.00
0.08	0.37	0.37	0.00%	0.00	0.00	0.00	0.00
0.08	0.37	0.37	0.00%	0.00	0.00	0.00	0.00
0.34	1.47	1.47	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.07	0.33	0.33	21.00%	1.52	15.61	68.36	68.36
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	0.00%	0.00	0.00	0.00	0.00
0.09	0.41	0.41	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.89	8.29	8.29	0.20%	0.02	0.21	0.92	0.92
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.12	0.55	0.55	0.00%	0.00	0.00	0.00	0.00
0.09	0.40	0.40	0.00%	0.00	0.00	0.00	0.00
0.09	0.40	0.40	0.00%	0.00	0.00	0.00	0.00
0.72	3.14	3.14	38.90%	2.99	12.12	53.06	53.06
0.72	3.14	3.14	38.90%	2.99	12.12	53.06	53.06
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
3.05	13.34	13.34	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
5.65	24.77	COMG 003		1.64	27.72	121.42	COMG 003

is the Max for a Single HAP

hexamethyltoluene Methyl Isobut Ethylbenzene Cumene Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.569949

McNeilus Truck & Manufacturing, Inc.

EQUI 2 - Line 6 Paint and Touch-Up Booth

TREA 2: Mat or Panel Filter (Line 6 Paint and Touch-up Booth)

Filter Control Eff.: PM, PM₁₀, and PM_{2.5} = 85% 85.0% 85.0%

STRU 57: Line 6 Paint & Touch-up Booth

STRU 58: Line 6 Paint & Touch-up Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	18
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	18
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	18
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	18
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	18
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	18
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	18
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	18
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	18
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	18
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	18
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	18
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	18
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	18
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	18
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	18
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	18
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	18
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	18
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	18
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	18
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	18
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	18
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	18
480972	Autocoat BT Toner B610	Topcoat	61%	2	18
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	18
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	18
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	18
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	18
509953	Autocoat BT Toner B627	Topcoat	61%	2	18
509957	Autocoat BT Toner B632	Topcoat	61%	2	18
509958	Autocoat BT Toner B649	Topcoat	61%	2	18
509959	Autocoat BT Toner B653	Topcoat	61%	2	18
509981	Autocoat BT Toner B664	Topcoat	61%	2	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	18
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	18
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	18
391191	Exempt Reducer	Reducer	15%	2	18
480460	AT105 Bus Reducer SRA	Reducer	15%	2	18
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	18
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	18
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	18
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency f

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
16.88	12.93	75%	20.50%	2.65	29.97	131.26	COMG 003
16.88	14.33	75%	17.93%	2.57	29.06	127.27	COMG 003
16.88	7.69	75%	67.90%	5.22	29.08	127.36	COMG 003
16.88	7.69	75%	67.90%	5.22	29.08	127.36	COMG 003
16.88	9.10	75%	15.20%	1.38	7.70	33.74	COMG 003
16.88	12.74	75%	21.11%	2.69	27.69	121.28	COMG 003
16.88	12.74	75%	21.11%	2.69	27.69	121.28	COMG 003
16.88	8.60	75%	36.40%	3.13	32.22	141.14	COMG 003
16.88	8.81	75%	33.60%	2.96	30.47	133.46	COMG 003
16.88	8.98	75%	35.80%	3.21	33.09	144.95	COMG 003
16.88	10.48	75%	30.50%	3.20	32.90	144.11	COMG 003
16.88	9.66	75%	32.71%	3.16	32.53	142.47	COMG 003
16.88	8.80	75%	35.23%	3.10	31.91	139.77	COMG 003
16.88	8.57	75%	36.70%	3.15	32.38	141.81	COMG 003
16.88	9.37	75%	33.50%	3.14	32.31	141.52	COMG 003
16.88	8.15	75%	47.98%	3.91	40.25	176.29	COMG 003
16.88	8.11	75%	54.50%	4.42	45.50	199.28	COMG 003
16.88	8.16	75%	44.49%	3.63	37.37	163.66	COMG 003
16.88	10.78	75%	30.80%	3.32	34.18	149.69	COMG 003
16.88	12.48	75%	26.10%	3.26	33.53	146.86	COMG 003
16.88	7.22	75%	100.20%	7.23	74.47	326.18	COMG 003
16.88	9.51	75%	34.38%	3.27	33.66	147.43	COMG 003
16.88	9.50	75%	34.32%	3.26	33.56	146.98	COMG 003
16.88	9.00	75%	37.00%	3.33	34.28	150.14	COMG 003
16.88	12.45	75%	24.58%	3.06	31.50	137.97	COMG 003
16.88	15.00	75%	17.40%	2.61	26.87	117.68	COMG 003
16.88	9.00	75%	35.70%	3.21	33.07	144.86	COMG 003
16.88	10.21	75%	44.86%	4.58	47.15	206.50	COMG 003
16.88	11.85	75%	27.51%	3.26	33.56	146.98	COMG 003
16.88	12.11	75%	27.00%	3.27	33.66	147.42	COMG 003
16.88	8.95	75%	33.63%	3.01	30.98	135.71	COMG 003
16.88	9.31	75%	33.70%	3.14	32.30	141.46	COMG 003
16.88	12.14	75%	24.88%	3.02	31.09	136.16	COMG 003
16.88	8.82	75%	35.90%	3.17	32.59	142.76	COMG 003
16.88	8.81	75%	34.40%	3.03	31.20	136.64	COMG 003
16.88	7.69	75%	67.90%	5.22	21.15	92.62	COMG 003
16.88	7.69	75%	67.90%	5.22	21.15	92.62	COMG 003
16.88	9.10	75%	15.20%	1.38	5.60	24.54	COMG 003
16.88	7.19	75%	100.00%	7.19	18.20	79.71	COMG 003
16.88	7.25	75%	95.86%	6.95	17.59	77.05	COMG 003
16.88	6.89	75%	100.00%	6.89	17.44	76.39	COMG 003
16.88	6.86	75%	90.00%	6.17	15.63	68.45	COMG 003
16.88	7.07	75%	98.50%	6.96	17.63	77.21	COMG 003
					113.82	498.52	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	29.13	127.60	4.37	19.14	79.71%	10.31	29.13
82.10%	11.76	33.25	145.65	4.99	21.85	82.10%	11.76	33.25
32.30%	2.48	3.46	15.15	0.52	2.27	32.30%	2.48	3.46
32.30%	2.48	3.46	15.15	0.52	2.27	32.30%	2.48	3.46
85.00%	7.74	10.77	47.17	1.62	7.07	85.00%	7.74	10.77
79.00%	10.06	25.90	113.44	3.89	17.02	79.00%	10.06	25.90
79.00%	10.06	25.90	113.44	3.89	17.02	79.00%	10.06	25.90
64.00%	5.50	14.16	62.04	2.12	9.31	64.00%	5.50	14.16
66.50%	5.86	15.08	66.04	2.26	9.91	66.50%	5.86	15.08
64.30%	5.77	14.86	65.08	2.23	9.76	64.30%	5.77	14.86
70.00%	7.34	18.88	82.69	2.83	12.40	70.00%	7.34	18.88
67.40%	6.51	16.76	73.39	2.51	11.01	67.40%	6.51	16.76
65.00%	5.72	14.72	64.47	2.21	9.67	65.00%	5.72	14.72
63.30%	5.42	13.96	61.15	2.09	9.17	63.30%	5.42	13.96
67.00%	6.28	16.16	70.76	2.42	10.61	67.00%	6.28	16.16
52.00%	4.24	10.91	47.77	1.64	7.17	52.00%	4.24	10.91
46.00%	3.73	9.60	42.05	1.44	6.31	46.00%	3.73	9.60
55.00%	4.49	11.55	50.59	1.73	7.59	55.00%	4.49	11.55
69.00%	7.44	19.14	83.84	2.87	12.58	69.00%	7.44	19.14
74.10%	9.25	23.80	104.24	3.57	15.64	74.10%	9.25	23.80
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	16.06	70.34	2.41	10.55	65.62%	6.24	16.06
66.00%	6.27	16.14	70.67	2.42	10.60	66.00%	6.27	16.14
63.00%	5.67	14.59	63.91	2.19	9.59	63.00%	5.67	14.59
75.42%	9.39	24.16	105.84	3.62	15.88	75.42%	9.39	24.16
83.00%	12.45	32.04	140.33	4.81	21.05	83.00%	12.45	32.04
64.00%	5.76	14.82	64.92	2.22	9.74	64.00%	5.76	14.82
55.20%	5.64	14.50	63.53	2.18	9.53	55.20%	5.64	14.50
73.00%	8.65	22.26	97.51	3.34	14.63	73.00%	8.65	22.26
73.00%	8.84	22.75	99.64	3.41	14.95	73.00%	8.84	22.75
66.40%	5.94	15.29	66.99	2.29	10.05	66.40%	5.94	15.29
66.20%	6.16	15.86	69.47	2.38	10.42	66.20%	6.16	15.86
75.20%	9.13	23.49	102.90	3.52	15.44	75.20%	9.13	23.49
64.20%	5.66	14.57	63.83	2.19	9.57	64.20%	5.66	14.57
66.00%	5.81	14.96	65.54	2.24	9.83	66.00%	5.81	14.96
32.30%	2.48	2.51	11.02	0.38	1.65	32.30%	2.48	2.51
32.30%	2.48	2.51	11.02	0.38	1.65	32.30%	2.48	2.51
85.00%	7.74	7.83	34.30	1.17	5.15	85.00%	7.74	7.83
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.19	0.84	0.03	0.13	4.20%	0.30	0.19
37.50%	2.58	1.64	7.16	0.25	1.07	37.50%	2.58	1.64
10.00%	0.69	0.43	1.90	0.07	0.29	10.00%	0.69	0.43
2.00%	0.14	0.09	0.39	0.01	0.06	2.00%	0.14	0.09
		44.02	192.82	6.60	COMG 003			44.02

PM _{2.5}	PM _{2.5}	PM _{2.5}	Formaldehyde CAS# 50-00-0					Methanol	
Uncontrolled	Limited	Limited		Uncontrolled	Uncontrolled	Limited			
(ton/yr)	(lb/hr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
127.60	4.37	19.14	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
145.65	4.99	21.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
15.15	0.52	2.27	0.10%	0.01	0.04	0.19	0.19	0.20%	0.02
15.15	0.52	2.27	0.10%	0.01	0.04	0.19	0.19	0.20%	0.02
47.17	1.62	7.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
113.44	3.89	17.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
113.44	3.89	17.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
62.04	2.12	9.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
66.04	2.26	9.91	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
65.08	2.23	9.76	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.69	2.83	12.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
73.39	2.51	11.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
64.47	2.21	9.67	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
61.15	2.09	9.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.76	2.42	10.61	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
47.77	1.64	7.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
42.05	1.44	6.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
50.59	1.73	7.59	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
83.84	2.87	12.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
104.24	3.57	15.64	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.34	2.41	10.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.67	2.42	10.60	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.91	2.19	9.59	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
105.84	3.62	15.88	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
140.33	4.81	21.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
64.92	2.22	9.74	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.53	2.18	9.53	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.51	3.34	14.63	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
99.64	3.41	14.95	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
66.99	2.29	10.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
69.47	2.38	10.42	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
102.90	3.52	15.44	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.83	2.19	9.57	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
65.54	2.24	9.83	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.02	0.38	1.65	0.10%	0.01	0.03	0.14	0.14	0.20%	0.02
11.02	0.38	1.65	0.10%	0.01	0.03	0.14	0.14	0.20%	0.02
34.30	1.17	5.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.84	0.03	0.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
7.16	0.25	1.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.90	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.39	0.01	0.06	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
192.82	6.60	COMG 003		0.00	0.04	0.19	COMG 003		0.01

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene CAS# 100-101-7	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.09	0.38	0.38	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.09	0.38	0.38	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.18	0.78	0.78	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.79	0.79	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.95	0.95	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.10	0.44	0.44	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.79	0.79	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.77	0.77	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.84	0.84	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.25	1.10	1.10	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.25	1.10	1.10	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.17	0.74	0.74	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.11	0.49	0.49	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.56	0.56	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.37	1.63	1.63	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.20	0.86	0.86	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.28	1.22	1.22	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.15	0.68	0.68	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.11	0.46	0.46	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.12	0.53	0.53	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.12	0.55	0.55	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.84	0.84	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.36	1.59	1.59	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.36	1.59	1.59	0.00%	0.00
0.06	0.27	0.27	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.06	0.27	0.27	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.13	0.56	0.56	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.09	0.38	COMG 003		0.03	0.50	2.19	COMG 003		0.08

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Max Organic HAP Emissions by Mix that
All worst case Glycol Ether xylene
2.70 2.337309 1.543808

HAP-Organic

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.44	1.92	1.92	4.50%	0.58	6.58	28.81	28.81
0.65	2.84	2.84	3.60%	0.52	5.83	25.55	25.55
0.98	4.31	4.31	38.90%	2.99	16.66	72.96	72.96
0.98	4.31	4.31	38.90%	2.99	16.66	72.96	72.96
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.31	5.74	5.74	6.70%	0.85	8.79	38.49	38.49
1.31	5.74	5.74	6.70%	0.85	8.79	38.49	38.49
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.37	1.62	1.62
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.42	0.42	0.00%	0.00	0.00	0.00	0.00
0.08	0.37	0.37	0.00%	0.00	0.00	0.00	0.00
0.08	0.37	0.37	0.00%	0.00	0.00	0.00	0.00
0.34	1.47	1.47	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.07	0.33	0.33	21.00%	1.52	15.61	68.36	68.36
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	0.00%	0.00	0.00	0.00	0.00
0.09	0.41	0.41	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.89	8.29	8.29	0.20%	0.02	0.21	0.92	0.92
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.12	0.55	0.55	0.00%	0.00	0.00	0.00	0.00
0.09	0.40	0.40	0.00%	0.00	0.00	0.00	0.00
0.09	0.40	0.40	0.00%	0.00	0.00	0.00	0.00
0.72	3.14	3.14	38.90%	2.99	12.12	53.06	53.06
0.72	3.14	3.14	38.90%	2.99	12.12	53.06	53.06
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
3.05	13.34	13.34	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
5.65	24.77	COMG 003		1.64	27.72	121.42	COMG 003

is the Max for a Single HAP

hexamethyltoluene Methyl Isobut Ethylbenzene Cumene Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.569949

McNeilus Truck & Manufacturing, Inc.

EQUI 4 - High Flow Line Paint & Prime Booth

TREA 4: Mat or Panel Filter (High Flow Line Paint & Prime Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 67: High Flow Line Paint and Prime Booth

Akzo Nobel Product Name	Product Description	Coating Type	Coating Mix (%)	Spray Gun (#)	Gun Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	3.37
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	3.37
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	3.37
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	3.37
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	3.37
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	3.37
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	3.37
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	3.37
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	3.37
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	3.37
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	3.37
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	3.37
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	3.37
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	3.37
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	3.37
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	3.37
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	3.37
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	3.37
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	3.37
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	3.37
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	3.37
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	3.37
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	3.37
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	3.37
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	3.37
480972	Autocoat BT Toner B610	Topcoat	61%	2	3.37
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	3.37
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	3.37
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	3.37
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	3.37
509953	Autocoat BT Toner B627	Topcoat	61%	2	3.37
509957	Autocoat BT Toner B632	Topcoat	61%	2	3.37
509958	Autocoat BT Toner B649	Topcoat	61%	2	3.37
509959	Autocoat BT Toner B653	Topcoat	61%	2	3.37
509981	Autocoat BT Toner B664	Topcoat	61%	2	3.37
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	3.37
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	3.37
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	3.37
391191	Exempt Reducer	Reducer	15%	2	3.37
480460	AT105 Bus Reducer SRA	Reducer	15%	2	3.37
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	3.37
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	3.37
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	3.37
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
3.16	12.93	75%	20.50%	2.65	5.61	24.58	COMG 003
3.16	14.33	75%	17.93%	2.57	5.44	23.83	COMG 003
3.16	7.69	75%	67.90%	5.22	5.44	23.84	COMG 003
3.16	7.69	75%	67.90%	5.22	5.44	23.84	COMG 003
3.16	9.10	75%	15.20%	1.38	1.44	6.32	COMG 003
3.16	12.74	75%	21.11%	2.69	5.18	22.71	COMG 003
3.16	12.74	75%	21.11%	2.69	5.18	22.71	COMG 003
3.16	8.60	75%	36.40%	3.13	6.03	26.42	COMG 003
3.16	8.81	75%	33.60%	2.96	5.70	24.99	COMG 003
3.16	8.98	75%	35.80%	3.21	6.20	27.14	COMG 003
3.16	10.48	75%	30.50%	3.20	6.16	26.98	COMG 003
3.16	9.66	75%	32.71%	3.16	6.09	26.67	COMG 003
3.16	8.80	75%	35.23%	3.10	5.97	26.17	COMG 003
3.16	8.57	75%	36.70%	3.15	6.06	26.55	COMG 003
3.16	9.37	75%	33.50%	3.14	6.05	26.50	COMG 003
3.16	8.15	75%	47.98%	3.91	7.54	33.01	COMG 003
3.16	8.11	75%	54.50%	4.42	8.52	37.31	COMG 003
3.16	8.16	75%	44.49%	3.63	7.00	30.64	COMG 003
3.16	10.78	75%	30.80%	3.32	6.40	28.02	COMG 003
3.16	12.48	75%	26.10%	3.26	6.28	27.50	COMG 003
3.16	7.22	75%	100.20%	7.23	13.94	61.07	COMG 003
3.16	9.51	75%	34.38%	3.27	6.30	27.60	COMG 003
3.16	9.50	75%	34.32%	3.26	6.28	27.52	COMG 003
3.16	9.00	75%	37.00%	3.33	6.42	28.11	COMG 003
3.16	12.45	75%	24.58%	3.06	5.90	25.83	COMG 003
3.16	15.00	75%	17.40%	2.61	5.03	22.03	COMG 003
3.16	9.00	75%	35.70%	3.21	6.19	27.12	COMG 003
3.16	10.21	75%	44.86%	4.58	8.83	38.66	COMG 003
3.16	11.85	75%	27.51%	3.26	6.28	27.52	COMG 003
3.16	12.11	75%	27.00%	3.27	6.30	27.60	COMG 003
3.16	8.95	75%	33.63%	3.01	5.80	25.41	COMG 003
3.16	9.31	75%	33.70%	3.14	6.05	26.48	COMG 003
3.16	12.14	75%	24.88%	3.02	5.82	25.49	COMG 003
3.16	8.82	75%	35.90%	3.17	6.10	26.73	COMG 003
3.16	8.81	75%	34.40%	3.03	5.84	25.58	COMG 003
3.16	7.69	75%	67.90%	5.22	3.96	17.34	COMG 003
3.16	7.69	75%	67.90%	5.22	3.96	17.34	COMG 003
3.16	9.10	75%	15.20%	1.38	1.05	4.59	COMG 003
3.16	7.19	75%	100.00%	7.19	3.41	14.92	COMG 003
3.16	7.25	75%	95.86%	6.95	3.29	14.43	COMG 003
3.16	6.89	75%	100.00%	6.89	3.27	14.30	COMG 003
3.16	6.86	75%	90.00%	6.17	2.93	12.82	COMG 003
3.16	7.07	75%	98.50%	6.96	3.30	14.46	COMG 003
					21.31	93.33	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	5.45	23.89	0.82	3.58	79.71%	10.31	5.45
82.10%	11.76	6.23	27.27	0.93	4.09	82.10%	11.76	6.23
32.30%	2.48	0.65	2.84	0.10	0.43	32.30%	2.48	0.65
32.30%	2.48	0.65	2.84	0.10	0.43	32.30%	2.48	0.65
85.00%	7.74	2.02	8.83	0.30	1.32	85.00%	7.74	2.02
79.00%	10.06	4.85	21.24	0.73	3.19	79.00%	10.06	4.85
79.00%	10.06	4.85	21.24	0.73	3.19	79.00%	10.06	4.85
64.00%	5.50	2.65	11.62	0.40	1.74	64.00%	5.50	2.65
66.50%	5.86	2.82	12.36	0.42	1.85	66.50%	5.86	2.82
64.30%	5.77	2.78	12.19	0.42	1.83	64.30%	5.77	2.78
70.00%	7.34	3.53	15.48	0.53	2.32	70.00%	7.34	3.53
67.40%	6.51	3.14	13.74	0.47	2.06	67.40%	6.51	3.14
65.00%	5.72	2.76	12.07	0.41	1.81	65.00%	5.72	2.76
63.30%	5.42	2.61	11.45	0.39	1.72	63.30%	5.42	2.61
67.00%	6.28	3.02	13.25	0.45	1.99	67.00%	6.28	3.02
52.00%	4.24	2.04	8.94	0.31	1.34	52.00%	4.24	2.04
46.00%	3.73	1.80	7.87	0.27	1.18	46.00%	3.73	1.80
55.00%	4.49	2.16	9.47	0.32	1.42	55.00%	4.49	2.16
69.00%	7.44	3.58	15.70	0.54	2.35	69.00%	7.44	3.58
74.10%	9.25	4.46	19.52	0.67	2.93	74.10%	9.25	4.46
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	3.01	13.17	0.45	1.98	65.62%	6.24	3.01
66.00%	6.27	3.02	13.23	0.45	1.98	66.00%	6.27	3.02
63.00%	5.67	2.73	11.97	0.41	1.79	63.00%	5.67	2.73
75.42%	9.39	4.52	19.82	0.68	2.97	75.42%	9.39	4.52
83.00%	12.45	6.00	26.27	0.90	3.94	83.00%	12.45	6.00
64.00%	5.76	2.78	12.16	0.42	1.82	64.00%	5.76	2.78
55.20%	5.64	2.72	11.89	0.41	1.78	55.20%	5.64	2.72
73.00%	8.65	4.17	18.26	0.63	2.74	73.00%	8.65	4.17
73.00%	8.84	4.26	18.66	0.64	2.80	73.00%	8.84	4.26
66.40%	5.94	2.86	12.54	0.43	1.88	66.40%	5.94	2.86
66.20%	6.16	2.97	13.01	0.45	1.95	66.20%	6.16	2.97
75.20%	9.13	4.40	19.27	0.66	2.89	75.20%	9.13	4.40
64.20%	5.66	2.73	11.95	0.41	1.79	64.20%	5.66	2.73
66.00%	5.81	2.80	12.27	0.42	1.84	66.00%	5.81	2.80
32.30%	2.48	0.47	2.06	0.07	0.31	32.30%	2.48	0.47
32.30%	2.48	0.47	2.06	0.07	0.31	32.30%	2.48	0.47
85.00%	7.74	1.47	6.42	0.22	0.96	85.00%	7.74	1.47
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.04	0.16	0.01	0.02	4.20%	0.30	0.04
37.50%	2.58	0.31	1.34	0.05	0.20	37.50%	2.58	0.31
10.00%	0.69	0.08	0.36	0.01	0.05	10.00%	0.69	0.08
2.00%	0.14	0.02	0.07	0.00	0.01	2.00%	0.14	0.02
		8.24	36.10	1.24	COMG 003			8.24

volatile			Fomaldehyde CAS# 50-00-0					volatile	
PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)		Uncontrolled			Limited		Meth
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
23.89	0.82	3.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
27.27	0.93	4.09	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.84	0.10	0.43	0.10%	0.01	0.01	0.04	0.04	0.20%	0.02
2.84	0.10	0.43	0.10%	0.01	0.01	0.04	0.04	0.20%	0.02
8.83	0.30	1.32	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
21.24	0.73	3.19	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
21.24	0.73	3.19	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.62	0.40	1.74	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
12.36	0.42	1.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
12.19	0.42	1.83	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
15.48	0.53	2.32	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
13.74	0.47	2.06	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
12.07	0.41	1.81	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.45	0.39	1.72	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
13.25	0.45	1.99	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
8.94	0.31	1.34	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
7.87	0.27	1.18	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.47	0.32	1.42	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
15.70	0.54	2.35	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
19.52	0.67	2.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
13.17	0.45	1.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
13.23	0.45	1.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.97	0.41	1.79	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
19.82	0.68	2.97	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
26.27	0.90	3.94	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
12.16	0.42	1.82	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.89	0.41	1.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
18.26	0.63	2.74	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
18.66	0.64	2.80	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
12.54	0.43	1.88	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
13.01	0.45	1.95	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
19.27	0.66	2.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.95	0.41	1.79	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
12.27	0.42	1.84	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.06	0.07	0.31	0.10%	0.01	0.01	0.03	0.03	0.20%	0.02
2.06	0.07	0.31	0.10%	0.01	0.01	0.03	0.03	0.20%	0.02
6.42	0.22	0.96	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.16	0.01	0.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.34	0.05	0.20	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.36	0.01	0.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.07	0.00	0.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
36.10	1.24	COMG 003	0.00	0.01	0.04	COMG 003		0.01	

volatile			Cumene CAS# 98-82-8						volatile	
anol CAS# 67-56-1									Ethylbenzene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited				
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.02	0.07	0.07	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.02	0.07	0.07	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.20%	0.02	0.03	0.15	0.15	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.15	0.15	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.15	0.15	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.04	0.18	0.18	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.02	0.08	0.08	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.15	0.15	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.14	0.14	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.04	0.16	0.16	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.05	0.21	0.21	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.05	0.21	0.21	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.14	0.14	0.10%	0.01	
0.00	0.00	0.00	0.10%	0.01	0.02	0.09	0.09	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.02	0.11	0.11	0.00%	0.00	
0.00	0.00	0.00	0.50%	0.04	0.07	0.30	0.30	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.04	0.16	0.16	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.03	0.05	0.23	0.23	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.02	0.03	0.13	0.13	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.15	0.15	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.02	0.09	0.09	0.40%	0.04	
0.00	0.00	0.00	0.10%	0.01	0.02	0.10	0.10	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.02	0.10	0.10	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.03	0.15	0.15	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.04	0.16	0.16	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.07	0.30	0.30	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.07	0.30	0.30	0.00%	0.00	
0.01	0.05	0.05	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.01	0.05	0.05	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.70%	0.05	0.02	0.11	0.11	3.90%	0.28	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.02	0.07	COMG 003		0.03	0.09	0.41	COMG 003		0.08	

[illegible]

HAP-Organic

Max Organic HAP Emissions by Mix that
All worst case Glycol Ether xylene
2.70 2.337309 1.543808

HAP-Organic

volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA					
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited		
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	
0.08	0.36	0.36	4.50%	0.58	1.23	5.39	5.39	
0.12	0.53	0.53	3.60%	0.52	1.09	4.78	4.78	
0.18	0.81	0.81	38.90%	2.99	3.12	13.66	13.66	
0.18	0.81	0.81	38.90%	2.99	3.12	13.66	13.66	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.25	1.08	1.08	6.70%	0.85	1.65	7.21	7.21	
0.25	1.08	1.08	6.70%	0.85	1.65	7.21	7.21	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.40%	0.04	0.07	0.30	0.30	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.02	0.08	0.08	0.00%	0.00	0.00	0.00	0.00	
0.02	0.07	0.07	0.00%	0.00	0.00	0.00	0.00	
0.02	0.07	0.07	0.00%	0.00	0.00	0.00	0.00	
0.06	0.28	0.28	0.00%	0.00	0.00	0.00	0.00	
0.02	0.09	0.09	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.01	0.06	0.06	21.00%	1.52	2.92	12.80	12.80	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.02	0.08	0.08	0.00%	0.00	0.00	0.00	0.00	
0.02	0.08	0.08	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.35	1.55	1.55	0.20%	0.02	0.04	0.17	0.17	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.02	0.10	0.10	0.00%	0.00	0.00	0.00	0.00	
0.02	0.07	0.07	0.00%	0.00	0.00	0.00	0.00	
0.02	0.07	0.07	0.00%	0.00	0.00	0.00	0.00	
0.13	0.59	0.59	38.90%	2.99	2.27	9.93	9.93	
0.13	0.59	0.59	38.90%	2.99	2.27	9.93	9.93	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.57	2.50	2.50	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	
1.06	4.64	COMG 003		1.64	5.19	22.73	COMG 003	

is the Max for a Single HAP

hexamethyltoluene Methyl Isobut Ethylbenzene Cumene Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.569949

EQUI 11: Plant Wide Clean-Up Solvent Usage

VOC Emissions								
Product Name	Year 2024/25 usage (gal)	VOC Density (lb/gal)	Percent volatile	VOC (lb/gal)	Potential VOC (lb/hr)	Actual VOC Emissions (tpy)	Unrestricted Potential VOC (tpy)	Potential Limited VOC (tpy)
RC005601	48400	6.76	665%	6.26	44.97	151.50	196.96	COMG 003
MEK	5610	6.71	83%	6.71	5.59	18.82	24.47	COMG 003
Total					50.55	170.33	221.42	237

Notes:

Potential emissions based on 130% of 2024/2025 solvent usage.

HAP Emissions			
Toluene Density (lb/gal)	Potential Toluene (lb/hr)	Actual Toluene Emissions (tpy)	Unrestricted Potential Toluene (tpy)
0.330	2.37	7.98	10.38
0.000	0.00	0.00	0.00
Total	2.37	7.98	10.38

Methanol Density (lb/gal)	Potential Methanol (lb/hr)	Actual Methanol Emissions (tpy)	Unrestricted Potential Methanol (tpy)
0.041	0.29	0.98	1.28
0	0.00	0.00	0.00
Total	0.29	0.98	1.28

Xylene Density (lb/gal)	Potential Xylene (lb/hr)	Actual Xylene Emissions (tpy)	Unrestricted Potential Xylene (tpy)
0.281	2.02	6.79	8.83
0.000	0.00	0.00	0.00
Total	2.02	6.79	8.83

MIBK Density (lb/gal)	Potential MIBK (lb/hr)	Actual MIBK Emissions (tpy)	Unrestricted Potential MIBK (tpy)
0.317	2.28	7.67	9.97
0.000	0.00	0.00	0.00
Total	2.28	7.67	9.97

McNeilus Truck & Manufacturing, Inc.

EQUI 14 - Line 4 Paint Booth

TREA 16: Mat or Panel Filter (Line 4 Paint Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 18: Line 4 Paint Booth

STRU 19: Line 4 Paint Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	3	16
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	33%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	33%	3	16
381073	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
381074	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	3	16
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	3	16
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	3	16
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	3	16
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	3	16
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	3	16
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	3	16
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	3	16
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	3	16
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	3	16
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	3	16
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	3	16
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	3	16
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	3	16
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	3	16
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	3	16
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	3	16
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	3	16
480972	Autocoat BT Toner B610	Topcoat	61%	3	16
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	3	16
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	3	16
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	3	16
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	3	16
509953	Autocoat BT Toner B627	Topcoat	61%	3	16
509957	Autocoat BT Toner B632	Topcoat	61%	3	16
509958	Autocoat BT Toner B649	Topcoat	61%	3	16
509959	Autocoat BT Toner B653	Topcoat	61%	3	16
509981	Autocoat BT Toner B664	Topcoat	61%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	24%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	24%	3	16
391191	Exempt Reducer	Reducer	15%	3	16
480460	AT105 Bus Reducer SRA	Reducer	15%	3	16
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	3	16
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	3	16
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	3	16
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic volatile			HAP-Organic volatile						
PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0					Meth:	
			Uncontrolled			Uncontrolled	Limited		
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.06	0.25	COMG 003		0.01	

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.11	0.50	COMG 003		0.03	0.67	2.92	COMG 003		0.08

Max Organic HAP Emissions by Mix that All worst case Glycol Ether xylene
2.70 2.337309 1.543808

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

is the Max for a Single HAP

hexamethyler toluene Methyl Isobut Ethylbenzene Cumeme Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.583022

McNeilus Truck & Manufacturing, Inc.

EQUI 15 - Line 5 Paint Booth

TREA 17: Mat or Panel Filter (Line 5 Paint Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 22: Line 5 Paint Booth

STRU 23: Line 5 Paint Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	3	16
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	33%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	33%	3	16
381073	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
381074	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	3	16
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	3	16
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	3	16
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	3	16
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	3	16
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	3	16
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	3	16
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	3	16
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	3	16
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	3	16
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	3	16
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	3	16
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	3	16
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	3	16
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	3	16
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	3	16
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	3	16
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	3	16
480972	Autocoat BT Toner B610	Topcoat	61%	3	16
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	3	16
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	3	16
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	3	16
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	3	16
509953	Autocoat BT Toner B627	Topcoat	61%	3	16
509957	Autocoat BT Toner B632	Topcoat	61%	3	16
509958	Autocoat BT Toner B649	Topcoat	61%	3	16
509959	Autocoat BT Toner B653	Topcoat	61%	3	16
509981	Autocoat BT Toner B664	Topcoat	61%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	24%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	24%	3	16
391191	Exempt Reducer	Reducer	15%	3	16
480460	AT105 Bus Reducer SRA	Reducer	15%	3	16
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	3	16
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	3	16
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	3	16
Max Em. Rate					

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic
volatile

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0					Meth:	
			Uncontrolled			Limited		(%Wt)	(lb/gal)
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.06	0.25	COMG 003		0.01	

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.11	0.50	COMG 003		0.03	0.67	2.92	COMG 003		0.08

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

is the Max for a Single HAP

hexamethyler toluene Methyl Isobut Ethylbenzene Cumeme Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.583022

McNeilus Truck & Manufacturing, Inc.

EQUI 17 - Refuse Line Prime Booth

TREA 18: Refuse Line Prime Booth Panel Filter

TREA 41: Refuse Line Prime Booth Panel Filter

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 97.8% 97.8%

STRU 27: Refuse Line Prime Booth

STRU 30: Refuse Line Prime Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	4	18
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	4	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	4	18
384295	Autocryl LV EP Cip Hardener	Hardener	33%	4	18
480663	Autocoat BT LV650 Hardener	Hardener	33%	4	18
381073	Autocryl LV EP Chassis Black	Topcoat	61%	4	18
381074	Autocryl LV EP Chassis Black	Topcoat	61%	4	18
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	4	18
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	4	18
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	4	18
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	4	18
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	4	18
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	4	18
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	4	18
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	4	18
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	4	18
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	4	18
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	4	18
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	4	18
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	4	18
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	4	18
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	4	18
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	4	18
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	4	18
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	4	18
480972	Autocoat BT Toner B610	Topcoat	61%	4	18
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	4	18
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	4	18
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	4	18
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	4	18
509953	Autocoat BT Toner B627	Topcoat	61%	4	18
509957	Autocoat BT Toner B632	Topcoat	61%	4	18
509958	Autocoat BT Toner B649	Topcoat	61%	4	18
509959	Autocoat BT Toner B653	Topcoat	61%	4	18
509981	Autocoat BT Toner B664	Topcoat	61%	4	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	4	18
384295	Autocryl LV EP Cip Hardener	Hardener	24%	4	18
480663	Autocoat BT LV650 Hardener	Hardener	24%	4	18
391191	Exempt Reducer	Reducer	15%	4	18
480460	AT105 Bus Reducer SRA	Reducer	15%	4	18
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	4	18
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	4	18
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	4	18
Max Em. Rate					

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
33.75	12.93	75%	20.50%	2.65	59.94	262.53	COMG 003
33.75	14.33	75%	17.93%	2.57	58.11	254.54	COMG 003
33.75	7.69	75%	67.90%	5.22	58.15	254.72	COMG 003
33.75	7.69	75%	67.90%	5.22	58.15	254.72	COMG 003
33.75	9.10	75%	15.20%	1.38	15.41	67.48	COMG 003
33.75	12.74	75%	21.11%	2.69	55.38	242.57	COMG 003
33.75	12.74	75%	21.11%	2.69	55.38	242.57	COMG 003
33.75	8.60	75%	36.40%	3.13	64.45	282.28	COMG 003
33.75	8.81	75%	33.60%	2.96	60.94	266.93	COMG 003
33.75	8.98	75%	35.80%	3.21	66.19	289.89	COMG 003
33.75	10.48	75%	30.50%	3.20	65.81	288.23	COMG 003
33.75	9.66	75%	32.71%	3.16	65.06	284.95	COMG 003
33.75	8.80	75%	35.23%	3.10	63.82	279.54	COMG 003
33.75	8.57	75%	36.70%	3.15	64.75	283.61	COMG 003
33.75	9.37	75%	33.50%	3.14	64.62	283.05	COMG 003
33.75	8.15	75%	47.98%	3.91	80.50	352.58	COMG 003
33.75	8.11	75%	54.50%	4.42	91.00	398.56	COMG 003
33.75	8.16	75%	44.49%	3.63	74.73	327.33	COMG 003
33.75	10.78	75%	30.80%	3.32	68.35	299.38	COMG 003
33.75	12.48	75%	26.10%	3.26	67.06	293.72	COMG 003
33.75	7.22	75%	100.20%	7.23	148.94	652.35	COMG 003
33.75	9.51	75%	34.38%	3.27	67.32	294.87	COMG 003
33.75	9.50	75%	34.32%	3.26	67.12	293.96	COMG 003
33.75	9.00	75%	37.00%	3.33	68.56	300.28	COMG 003
33.75	12.45	75%	24.58%	3.06	63.00	275.93	COMG 003
33.75	15.00	75%	17.40%	2.61	53.73	235.35	COMG 003
33.75	9.00	75%	35.70%	3.21	66.15	289.73	COMG 003
33.75	10.21	75%	44.86%	4.58	94.29	412.99	COMG 003
33.75	11.85	75%	27.51%	3.26	67.12	293.96	COMG 003
33.75	12.11	75%	27.00%	3.27	67.31	294.84	COMG 003
33.75	8.95	75%	33.63%	3.01	61.97	271.42	COMG 003
33.75	9.31	75%	33.70%	3.14	64.59	282.92	COMG 003
33.75	12.14	75%	24.88%	3.02	62.17	272.32	COMG 003
33.75	8.82	75%	35.90%	3.17	65.19	285.52	COMG 003
33.75	8.81	75%	34.40%	3.03	62.39	273.28	COMG 003
33.75	7.69	75%	67.90%	5.22	42.29	185.25	COMG 003
33.75	7.69	75%	67.90%	5.22	42.29	185.25	COMG 003
33.75	9.10	75%	15.20%	1.38	11.20	49.07	COMG 003
33.75	7.19	75%	100.00%	7.19	36.40	159.43	COMG 003
33.75	7.25	75%	95.86%	6.95	35.18	154.11	COMG 003
33.75	6.89	75%	100.00%	6.89	34.88	152.78	COMG 003
33.75	6.86	75%	90.00%	6.17	31.26	136.90	COMG 003
33.75	7.07	75%	98.50%	6.96	35.25	154.42	COMG 003
					227.63	997.03	237.00

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	58.26	255.20	1.31	5.74	79.71%	10.31	58.26
82.10%	11.76	66.51	291.31	1.50	6.55	82.10%	11.76	66.51
32.30%	2.48	6.92	30.29	0.16	0.68	32.30%	2.48	6.92
32.30%	2.48	6.92	30.29	0.16	0.68	32.30%	2.48	6.92
85.00%	7.74	21.54	94.33	0.48	2.12	85.00%	7.74	21.54
79.00%	10.06	51.80	226.89	1.17	5.11	79.00%	10.06	51.80
79.00%	10.06	51.80	226.89	1.17	5.11	79.00%	10.06	51.80
64.00%	5.50	28.33	124.08	0.64	2.79	64.00%	5.50	28.33
66.50%	5.86	30.15	132.07	0.68	2.97	66.50%	5.86	30.15
64.30%	5.77	29.72	130.17	0.67	2.93	64.30%	5.77	29.72
70.00%	7.34	37.76	165.38	0.85	3.72	70.00%	7.34	37.76
67.40%	6.51	33.51	146.78	0.75	3.30	67.40%	6.51	33.51
65.00%	5.72	29.44	128.95	0.66	2.90	65.00%	5.72	29.44
63.30%	5.42	27.92	122.29	0.63	2.75	63.30%	5.42	27.92
67.00%	6.28	32.31	141.52	0.73	3.18	67.00%	6.28	32.31
52.00%	4.24	21.81	95.54	0.49	2.15	52.00%	4.24	21.81
46.00%	3.73	19.20	84.10	0.43	1.89	46.00%	3.73	19.20
55.00%	4.49	23.10	101.17	0.52	2.28	55.00%	4.49	23.10
69.00%	7.44	38.28	167.68	0.86	3.77	69.00%	7.44	38.28
74.10%	9.25	47.60	208.47	1.07	4.69	74.10%	9.25	47.60
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	32.12	140.68	0.72	3.17	65.62%	6.24	32.12
66.00%	6.27	32.27	141.35	0.73	3.18	66.00%	6.27	32.27
63.00%	5.67	29.18	127.82	0.66	2.88	63.00%	5.67	29.18
75.42%	9.39	48.33	211.68	1.09	4.76	75.42%	9.39	48.33
83.00%	12.45	64.08	280.66	1.44	6.31	83.00%	12.45	64.08
64.00%	5.76	29.65	129.85	0.67	2.92	64.00%	5.76	29.65
55.20%	5.64	29.01	127.05	0.65	2.86	55.20%	5.64	29.01
73.00%	8.65	44.52	195.01	1.00	4.39	73.00%	8.65	44.52
73.00%	8.84	45.50	199.29	1.02	4.48	73.00%	8.84	45.50
66.40%	5.94	30.59	133.97	0.69	3.01	66.40%	5.94	30.59
66.20%	6.16	31.72	138.94	0.71	3.13	66.20%	6.16	31.72
75.20%	9.13	46.99	205.80	1.06	4.63	75.20%	9.13	46.99
64.20%	5.66	29.14	127.65	0.66	2.87	64.20%	5.66	29.14
66.00%	5.81	29.93	131.08	0.67	2.95	66.00%	5.81	29.93
32.30%	2.48	5.03	22.03	0.11	0.50	32.30%	2.48	5.03
32.30%	2.48	5.03	22.03	0.11	0.50	32.30%	2.48	5.03
85.00%	7.74	15.66	68.61	0.35	1.54	85.00%	7.74	15.66
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.39	1.69	0.01	0.04	4.20%	0.30	0.39
37.50%	2.58	3.27	14.32	0.07	0.32	37.50%	2.58	3.27
10.00%	0.69	0.87	3.80	0.02	0.09	10.00%	0.69	0.87
2.00%	0.14	0.18	0.78	0.00	0.02	2.00%	0.14	0.18
		88.05	385.64	1.98	COMG 003			88.05

HAP-Organic
volatile

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0					Metha	
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)
255.20	1.31	5.74	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
291.31	1.50	6.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
30.29	0.16	0.68	0.10%	0.01	0.09	0.38	0.38	0.20%	0.02
30.29	0.16	0.68	0.10%	0.01	0.09	0.38	0.38	0.20%	0.02
94.33	0.48	2.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
226.89	1.17	5.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
226.89	1.17	5.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
124.08	0.64	2.79	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.07	0.68	2.97	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.17	0.67	2.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
165.38	0.85	3.72	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
146.78	0.75	3.30	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
128.95	0.66	2.90	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
122.29	0.63	2.75	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.52	0.73	3.18	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
95.54	0.49	2.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.10	0.43	1.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
101.17	0.52	2.28	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
167.68	0.86	3.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
208.47	1.07	4.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
140.68	0.72	3.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.35	0.73	3.18	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
127.82	0.66	2.88	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
211.68	1.09	4.76	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
280.66	1.44	6.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
129.85	0.67	2.92	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
127.05	0.65	2.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
195.01	1.00	4.39	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
199.29	1.02	4.48	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
133.97	0.69	3.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.94	0.71	3.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
205.80	1.06	4.63	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
127.65	0.66	2.87	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
131.08	0.67	2.95	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
22.03	0.11	0.50	0.10%	0.01	0.06	0.27	0.27	0.20%	0.02
22.03	0.11	0.50	0.10%	0.01	0.06	0.27	0.27	0.20%	0.02
68.61	0.35	1.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.69	0.01	0.04	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.32	0.07	0.32	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
3.80	0.02	0.09	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.78	0.00	0.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
385.64	1.98	COMG 003	0.00	0.09	0.38	COMG 003	0.01		

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8						Ethylbenzene CAS# 100-10-6	
Uncontrolled	Uncontrolled	Limited	Uncontrolled			Uncontrolled	Limited		Ethylbenzene	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.17	0.75	0.75	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.17	0.75	0.75	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.20%	0.02	0.35	1.55	1.55	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.36	1.59	1.59	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.37	1.62	1.62	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.43	1.89	1.89	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.20	0.87	0.87	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.36	1.59	1.59	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.35	1.55	1.55	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.39	1.69	1.69	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.50	2.20	2.20	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.50	2.19	2.19	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.34	1.47	1.47	0.10%	0.01	
0.00	0.00	0.00	0.10%	0.01	0.22	0.97	0.97	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.26	1.13	1.13	0.00%	0.00	
0.00	0.00	0.00	0.50%	0.04	0.74	3.26	3.26	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.39	1.71	1.71	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.03	0.56	2.43	2.43	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.02	0.31	1.35	1.35	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.37	1.62	1.62	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.21	0.92	0.92	0.40%	0.04	
0.00	0.00	0.00	0.10%	0.01	0.24	1.07	1.07	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.25	1.09	1.09	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.37	1.61	1.61	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.38	1.68	1.68	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.73	3.18	3.18	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.73	3.18	3.18	0.00%	0.00	
0.12	0.55	0.55	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.12	0.55	0.55	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.70%	0.05	0.26	1.13	1.13	3.90%	0.28	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.17	0.75	COMG 003		0.03	1.00	4.38	COMG 003		0.08	

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.88	3.84	3.84	4.50%	0.58	13.16	57.63	57.63
1.30	5.68	5.68	3.60%	0.52	11.67	51.09	51.09
1.97	8.63	8.63	38.90%	2.99	33.32	145.93	145.93
1.97	8.63	8.63	38.90%	2.99	33.32	145.93	145.93
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.62	11.49	11.49	6.70%	0.85	17.57	76.97	76.97
2.62	11.49	11.49	6.70%	0.85	17.57	76.97	76.97
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.74	3.24	3.24
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.19	0.84	0.84	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.67	2.94	2.94	0.00%	0.00	0.00	0.00	0.00
0.22	0.97	0.97	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	21.00%	1.52	31.21	136.72	136.72
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.20	0.86	0.86	0.00%	0.00	0.00	0.00	0.00
0.19	0.81	0.81	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
3.78	16.57	16.57	0.20%	0.02	0.42	1.84	1.84
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.25	1.09	1.09	0.00%	0.00	0.00	0.00	0.00
0.18	0.80	0.80	0.00%	0.00	0.00	0.00	0.00
0.18	0.79	0.79	0.00%	0.00	0.00	0.00	0.00
1.43	6.27	6.27	38.90%	2.99	24.23	106.13	106.13
1.43	6.27	6.27	38.90%	2.99	24.23	106.13	106.13
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
6.09	26.69	26.69	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
11.31	49.53	COMG 003		1.64	55.45	242.85	COMG 003

is the Max for a Single HAP

hexamethyler toluene Methyl Isobut Ethylbenzene Cumeme Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.583022

McNeilus Truck & Manufacturing, Inc.

EQUI 26 - Large Parts Prime & Paint

TREA 12: Mat or Panel Filter (Large Parts Prime & Paint)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 8: Large Parts Prime and Paint

Akzo Nobel Product Name	Product Description	Coating Type	Coating Mix (%)	Spray Gun (#)	Gun Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	18
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	18
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	18
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	18
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	18
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	18
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	18
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	18
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	18
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	18
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	18
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	18
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	18
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	18
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	18
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	18
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	18
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	18
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	18
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	18
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	18
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	18
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	18
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	18
480972	Autocoat BT Toner B610	Topcoat	61%	2	18
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	18
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	18
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	18
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	18
509953	Autocoat BT Toner B627	Topcoat	61%	2	18
509957	Autocoat BT Toner B632	Topcoat	61%	2	18
509958	Autocoat BT Toner B649	Topcoat	61%	2	18
509959	Autocoat BT Toner B653	Topcoat	61%	2	18
509981	Autocoat BT Toner B664	Topcoat	61%	2	18
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	18
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	18
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	18
391191	Exempt Reducer	Reducer	15%	2	18
480460	AT105 Bus Reducer SRA	Reducer	15%	2	18
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	18
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	18
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	18
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
16.88	12.93	75%	20.50%	2.65	29.97	131.26	COMG 003
16.88	14.33	75%	17.93%	2.57	29.06	127.27	COMG 003
16.88	7.69	75%	67.90%	5.22	29.08	127.36	COMG 003
16.88	7.69	75%	67.90%	5.22	29.08	127.36	COMG 003
16.88	9.10	75%	15.20%	1.38	7.70	33.74	COMG 003
16.88	12.74	75%	21.11%	2.69	27.69	121.28	COMG 003
16.88	12.74	75%	21.11%	2.69	27.69	121.28	COMG 003
16.88	8.60	75%	36.40%	3.13	32.22	141.14	COMG 003
16.88	8.81	75%	33.60%	2.96	30.47	133.46	COMG 003
16.88	8.98	75%	35.80%	3.21	33.09	144.95	COMG 003
16.88	10.48	75%	30.50%	3.20	32.90	144.11	COMG 003
16.88	9.66	75%	32.71%	3.16	32.53	142.47	COMG 003
16.88	8.80	75%	35.23%	3.10	31.91	139.77	COMG 003
16.88	8.57	75%	36.70%	3.15	32.38	141.81	COMG 003
16.88	9.37	75%	33.50%	3.14	32.31	141.52	COMG 003
16.88	8.15	75%	47.98%	3.91	40.25	176.29	COMG 003
16.88	8.11	75%	54.50%	4.42	45.50	199.28	COMG 003
16.88	8.16	75%	44.49%	3.63	37.37	163.66	COMG 003
16.88	10.78	75%	30.80%	3.32	34.18	149.69	COMG 003
16.88	12.48	75%	26.10%	3.26	33.53	146.86	COMG 003
16.88	7.22	75%	100.20%	7.23	74.47	326.18	COMG 003
16.88	9.51	75%	34.38%	3.27	33.66	147.43	COMG 003
16.88	9.50	75%	34.32%	3.26	33.56	146.98	COMG 003
16.88	9.00	75%	37.00%	3.33	34.28	150.14	COMG 003
16.88	12.45	75%	24.58%	3.06	31.50	137.97	COMG 003
16.88	15.00	75%	17.40%	2.61	26.87	117.68	COMG 003
16.88	9.00	75%	35.70%	3.21	33.07	144.86	COMG 003
16.88	10.21	75%	44.86%	4.58	47.15	206.50	COMG 003
16.88	11.85	75%	27.51%	3.26	33.56	146.98	COMG 003
16.88	12.11	75%	27.00%	3.27	33.66	147.42	COMG 003
16.88	8.95	75%	33.63%	3.01	30.98	135.71	COMG 003
16.88	9.31	75%	33.70%	3.14	32.30	141.46	COMG 003
16.88	12.14	75%	24.88%	3.02	31.09	136.16	COMG 003
16.88	8.82	75%	35.90%	3.17	32.59	142.76	COMG 003
16.88	8.81	75%	34.40%	3.03	31.20	136.64	COMG 003
16.88	7.69	75%	67.90%	5.22	21.15	92.62	COMG 003
16.88	7.69	75%	67.90%	5.22	21.15	92.62	COMG 003
16.88	9.10	75%	15.20%	1.38	5.60	24.54	COMG 003
16.88	7.19	75%	100.00%	7.19	18.20	79.71	COMG 003
16.88	7.25	75%	95.86%	6.95	17.59	77.05	COMG 003
16.88	6.89	75%	100.00%	6.89	17.44	76.39	COMG 003
16.88	6.86	75%	90.00%	6.17	15.63	68.45	COMG 003
16.88	7.07	75%	98.50%	6.96	17.63	77.21	COMG 003
					113.82	498.52	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	29.13	127.60	4.37	19.14	79.71%	10.31	29.13
82.10%	11.76	33.25	145.65	4.99	21.85	82.10%	11.76	33.25
32.30%	2.48	3.46	15.15	0.52	2.27	32.30%	2.48	3.46
32.30%	2.48	3.46	15.15	0.52	2.27	32.30%	2.48	3.46
85.00%	7.74	10.77	47.17	1.62	7.07	85.00%	7.74	10.77
79.00%	10.06	25.90	113.44	3.89	17.02	79.00%	10.06	25.90
79.00%	10.06	25.90	113.44	3.89	17.02	79.00%	10.06	25.90
64.00%	5.50	14.16	62.04	2.12	9.31	64.00%	5.50	14.16
66.50%	5.86	15.08	66.04	2.26	9.91	66.50%	5.86	15.08
64.30%	5.77	14.86	65.08	2.23	9.76	64.30%	5.77	14.86
70.00%	7.34	18.88	82.69	2.83	12.40	70.00%	7.34	18.88
67.40%	6.51	16.76	73.39	2.51	11.01	67.40%	6.51	16.76
65.00%	5.72	14.72	64.47	2.21	9.67	65.00%	5.72	14.72
63.30%	5.42	13.96	61.15	2.09	9.17	63.30%	5.42	13.96
67.00%	6.28	16.16	70.76	2.42	10.61	67.00%	6.28	16.16
52.00%	4.24	10.91	47.77	1.64	7.17	52.00%	4.24	10.91
46.00%	3.73	9.60	42.05	1.44	6.31	46.00%	3.73	9.60
55.00%	4.49	11.55	50.59	1.73	7.59	55.00%	4.49	11.55
69.00%	7.44	19.14	83.84	2.87	12.58	69.00%	7.44	19.14
74.10%	9.25	23.80	104.24	3.57	15.64	74.10%	9.25	23.80
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	16.06	70.34	2.41	10.55	65.62%	6.24	16.06
66.00%	6.27	16.14	70.67	2.42	10.60	66.00%	6.27	16.14
63.00%	5.67	14.59	63.91	2.19	9.59	63.00%	5.67	14.59
75.42%	9.39	24.16	105.84	3.62	15.88	75.42%	9.39	24.16
83.00%	12.45	32.04	140.33	4.81	21.05	83.00%	12.45	32.04
64.00%	5.76	14.82	64.92	2.22	9.74	64.00%	5.76	14.82
55.20%	5.64	14.50	63.53	2.18	9.53	55.20%	5.64	14.50
73.00%	8.65	22.26	97.51	3.34	14.63	73.00%	8.65	22.26
73.00%	8.84	22.75	99.64	3.41	14.95	73.00%	8.84	22.75
66.40%	5.94	15.29	66.99	2.29	10.05	66.40%	5.94	15.29
66.20%	6.16	15.86	69.47	2.38	10.42	66.20%	6.16	15.86
75.20%	9.13	23.49	102.90	3.52	15.44	75.20%	9.13	23.49
64.20%	5.66	14.57	63.83	2.19	9.57	64.20%	5.66	14.57
66.00%	5.81	14.96	65.54	2.24	9.83	66.00%	5.81	14.96
32.30%	2.48	2.51	11.02	0.38	1.65	32.30%	2.48	2.51
32.30%	2.48	2.51	11.02	0.38	1.65	32.30%	2.48	2.51
85.00%	7.74	7.83	34.30	1.17	5.15	85.00%	7.74	7.83
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.19	0.84	0.03	0.13	4.20%	0.30	0.19
37.50%	2.58	1.64	7.16	0.25	1.07	37.50%	2.58	1.64
10.00%	0.69	0.43	1.90	0.07	0.29	10.00%	0.69	0.43
2.00%	0.14	0.09	0.39	0.01	0.06	2.00%	0.14	0.09
		44.02	192.82	6.60	COMG 003			44.02

HAP-Organic

HAP-Organic

volatile

volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Formaldehyde CAS# 50-00-0					Methanol	
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)
127.60	4.37	19.14	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
145.65	4.99	21.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
15.15	0.52	2.27	0.10%	0.01	0.04	0.19	0.19	0.20%	0.02
15.15	0.52	2.27	0.10%	0.01	0.04	0.19	0.19	0.20%	0.02
47.17	1.62	7.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
113.44	3.89	17.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
113.44	3.89	17.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
62.04	2.12	9.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
66.04	2.26	9.91	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
65.08	2.23	9.76	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.69	2.83	12.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
73.39	2.51	11.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
64.47	2.21	9.67	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
61.15	2.09	9.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.76	2.42	10.61	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
47.77	1.64	7.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
42.05	1.44	6.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
50.59	1.73	7.59	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
83.84	2.87	12.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
104.24	3.57	15.64	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.34	2.41	10.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
70.67	2.42	10.60	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.91	2.19	9.59	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
105.84	3.62	15.88	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
140.33	4.81	21.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
64.92	2.22	9.74	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.53	2.18	9.53	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.51	3.34	14.63	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
99.64	3.41	14.95	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
66.99	2.29	10.05	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
69.47	2.38	10.42	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
102.90	3.52	15.44	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.83	2.19	9.57	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
65.54	2.24	9.83	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
11.02	0.38	1.65	0.10%	0.01	0.03	0.14	0.14	0.20%	0.02
11.02	0.38	1.65	0.10%	0.01	0.03	0.14	0.14	0.20%	0.02
34.30	1.17	5.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.84	0.03	0.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
7.16	0.25	1.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.90	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.39	0.01	0.06	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
192.82	6.60	COMG 003	0.00	0.04	0.19	COMG 003	0.01		

HAP-Organic

HAP-Organic

volatile

volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.09	0.38	0.38	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.09	0.38	0.38	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.18	0.78	0.78	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.79	0.79	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.95	0.95	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.10	0.44	0.44	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.79	0.79	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.77	0.77	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.84	0.84	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.25	1.10	1.10	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.25	1.10	1.10	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.17	0.74	0.74	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.11	0.49	0.49	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.56	0.56	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.37	1.63	1.63	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.20	0.86	0.86	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.28	1.22	1.22	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.15	0.68	0.68	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.11	0.46	0.46	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.12	0.53	0.53	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.12	0.55	0.55	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.18	0.81	0.81	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.19	0.84	0.84	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.36	1.59	1.59	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.36	1.59	1.59	0.00%	0.00
0.06	0.27	0.27	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.06	0.27	0.27	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.13	0.56	0.56	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.09	0.38	COMG 003		0.03	0.50	2.19	COMG 003		0.08

HAP-Organic

volatile

[illegible]

HAP-Organic

HAP-Organic

volatile

volatile

Xylene CAS# 108-88-3			Hexamethylene-1,6-Diisocyanate CAS# 822-06-0						Xylene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited				
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.30%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.06	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.20%	0.02	0.10	0.44	0.44	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.11	0.46	0.46	0.00%	0.00	0.00	0.00	0.00	1.80%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.20%	0.02	0.07	0.32	0.32	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.02	0.08	0.08	0.00%	0.00	0.00	0.00	0.00	16.60%	1.20	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.12	0.54	COMG 003		0.01	0.10	0.44	COMG 003		0.34	

Max Organic HAP Emissions by Mix that

All worst case Glycol Ether xylene

2.70 2.337309 1.543808

HAP-Organic

volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.44	1.92	1.92	4.50%	0.58	6.58	28.81	28.81
0.65	2.84	2.84	3.60%	0.52	5.83	25.55	25.55
0.98	4.31	4.31	38.90%	2.99	16.66	72.96	72.96
0.98	4.31	4.31	38.90%	2.99	16.66	72.96	72.96
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.31	5.74	5.74	6.70%	0.85	8.79	38.49	38.49
1.31	5.74	5.74	6.70%	0.85	8.79	38.49	38.49
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.37	1.62	1.62
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.42	0.42	0.00%	0.00	0.00	0.00	0.00
0.08	0.37	0.37	0.00%	0.00	0.00	0.00	0.00
0.08	0.37	0.37	0.00%	0.00	0.00	0.00	0.00
0.34	1.47	1.47	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.07	0.33	0.33	21.00%	1.52	15.61	68.36	68.36
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	0.00%	0.00	0.00	0.00	0.00
0.09	0.41	0.41	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.89	8.29	8.29	0.20%	0.02	0.21	0.92	0.92
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.12	0.55	0.55	0.00%	0.00	0.00	0.00	0.00
0.09	0.40	0.40	0.00%	0.00	0.00	0.00	0.00
0.09	0.40	0.40	0.00%	0.00	0.00	0.00	0.00
0.72	3.14	3.14	38.90%	2.99	12.12	53.06	53.06
0.72	3.14	3.14	38.90%	2.99	12.12	53.06	53.06
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
3.05	13.34	13.34	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
5.65	24.77	COMG 003		1.64	27.72	121.42	COMG 003

is the Max for a Single HAP

hexamethyler toluene Methyl Isobut Ethylbenzene Cumeme Methanol Formaldehyde
 0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.569949

McNeilus Truck & Manufacturing, Inc.

EQUI 28 - Line 3 Paint Booth

TREA 14: Mat or Panel Filter (Line 3 Paint Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 13: Line 3 Paint Booth

STRU 14: Line 3 Paint Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	3	16
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	33%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	33%	3	16
381073	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
381074	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	3	16
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	3	16
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	3	16
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	3	16
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	3	16
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	3	16
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	3	16
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	3	16
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	3	16
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	3	16
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	3	16
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	3	16
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	3	16
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	3	16
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	3	16
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	3	16
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	3	16
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	3	16
480972	Autocoat BT Toner B610	Topcoat	61%	3	16
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	3	16
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	3	16
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	3	16
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	3	16
509953	Autocoat BT Toner B627	Topcoat	61%	3	16
509957	Autocoat BT Toner B632	Topcoat	61%	3	16
509958	Autocoat BT Toner B649	Topcoat	61%	3	16
509959	Autocoat BT Toner B653	Topcoat	61%	3	16
509981	Autocoat BT Toner B664	Topcoat	61%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	24%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	24%	3	16
391191	Exempt Reducer	Reducer	15%	3	16
480460	AT105 Bus Reducer SRA	Reducer	15%	3	16
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	3	16
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	3	16
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	3	16
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic volatile			HAP-Organic volatile						
PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Formaldehyde CAS# 50-00-0					Methanol	
				Uncontrolled	Uncontrolled	Limited			
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.00	0.06	0.25	COMG 003	0.01	

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.11	0.50	COMG 003		0.03	0.67	2.92	COMG 003		0.08

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited			Uncontrolled	Uncontrolled	Limited
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

is by Mix that is the Max for a Single HAP

xylene	hexamethyltoluene	Methyl Isobut Ethylbenzene Cumene	Methanol	Formaldehyde
1.543808	0.510121	1.549345	2.215551	1.549345
			2.338722	1.569949
				1.583022

Job No.	NA
Computed	GJR
Checked	KEG
Sheets	1

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 32: Large Parts Prime and Paint Air Make-Up STRU 8: Large Parts Prime and Paint Air Make-Up

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	2.23	2,181.4	19.1

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.218	0.96	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.183	0.80	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.017	0.07	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.017	0.07	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.017	0.07	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.012	0.05	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	262	1147	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.005	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.005	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	263	1153	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	1.09E-06	4.78E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.92E-07	8.43E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	4.58E-06	2.01E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	2.62E-06	1.15E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.64E-04	7.17E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	3.93E-03	1.72E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.33E-06	5.83E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	7.42E-06	3.25E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	4.36E-07	1.91E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	2.62E-08	1.15E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.40E-06	1.05E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	3.05E-06	1.34E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.83E-07	8.03E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	8.29E-07	3.63E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	5.67E-07	2.48E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	4.58E-06	2.01E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	5.24E-08	2.29E-07	COMG 003
Total HAPs =				1.80E-02	

Confirm EF
(lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracen	2.40E-06
3.40E-03	Benz(a)ant	1.80E-06
2.00E-04	Benzo(a)p	1.20E-06
1.20E-05	Benzo(b)fl	1.80E-06
1.10E-03	Benzo(g,h	1.20E-06
1.40E-03	Benzo(k)fl	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanath	1.70E-05
	Pyrene	5.00E-06
Total		8.82E-05

Notes:

- ^a Emission factors from AP-42 (07/98), Table 1.4-1
- ^b Emission factors from AP-42 (07/98), Table 1.4-2
- ^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- ^d Emission factors from AP-42 (07/98), Table 1.4-3
- ^e Emission factors from AP-42 (07/98), Table 1.4-4

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 33: Refuse Line Prime Booth Air Make-Up
STRU 27: Refuse Line Prime Booth
STRU 30: Refuse Line Prime Booth

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.68	4,583.3	40.2

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.458	2.01	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.385	1.69	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.035	0.15	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.035	0.15	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.035	0.15	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.025	0.11	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.003	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	550	2409	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.010	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.011	0.05	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	553	2423	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	2.29E-06	1.00E-05	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	4.04E-07	1.77E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	9.63E-06	4.22E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	5.50E-06	2.41E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	3.44E-04	1.51E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	8.25E-03	3.61E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.80E-06	1.22E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.56E-05	6.83E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	9.17E-07	4.02E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	5.50E-08	2.41E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	5.04E-06	2.21E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	6.42E-06	2.81E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.85E-07	1.69E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.74E-06	7.63E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.19E-06	5.22E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	9.63E-06	4.22E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	1.10E-07	4.82E-07	COMG 003
Total HAPs =			3.79E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)anl	1.80E-06
2.00E-04	Benzo(a)p	1.20E-06
1.20E-05	Benzo(b)fl	1.80E-06
1.10E-03	Benzo(g,h,	1.20E-06
1.40E-03	Benzo(k)fl	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanath	1.70E-05
	Pyrene	5.00E-06

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 36: High Flow Line Air Make-Up STRU 67: High Flow Line Paint & Prime Booth

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.68	4,583.3	40.2

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.458	2.01	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.385	1.69	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.035	0.15	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.035	0.15	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.035	0.15	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.025	0.11	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.003	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	550	2409	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.010	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.011	0.05	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	553	2423	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	2.29E-06	1.00E-05	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	4.04E-07	1.77E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	9.63E-06	4.22E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	5.50E-06	2.41E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	3.44E-04	1.51E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	8.25E-03	3.61E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.80E-06	1.22E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.56E-05	6.83E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	9.17E-07	4.02E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	5.50E-08	2.41E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	5.04E-06	2.21E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	6.42E-06	2.81E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.85E-07	1.69E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.74E-06	7.63E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.19E-06	5.22E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	9.63E-06	4.22E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	1.10E-07	4.82E-07	COMG 003
Total HAPs =			3.79E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylnaph	2.40E-05
2.10E-03	3-Methylchlor	1.80E-06
1.20E-03	7, 12-Dimethy	1.60E-05
7.50E-02	Acenaphthen	1.80E-06
1.80E+00	Acenaphthyle	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)anthr	1.80E-06
2.00E-04	Benzo(a)pyre	1.20E-06
1.20E-05	Benzo(b)fluor	1.80E-06
1.10E-03	Benzo(g,h,i)p	1.20E-06
1.40E-03	Benzo(k)fluor	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h)	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-	1.80E-06
	Phenanthrene	1.70E-05
	Pyrene	5.00E-06

Notes:

- ^a Emission factors from AP-42 (07/98), Table 1.4-1
^b Emission factors from AP-42 (07/98), Table 1.4-2
^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
^d Emission factors from AP-42 (07/98), Table 1.4-3
^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

McNeilus Truck & Manufacturing, Inc.

EQUI 37 - Line 3 Touch-Up Booth

TREA 30: Mat or Panel Filter (Line 3 Touch-Up Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 15: Line 3 Touch-Up Booth

STRU 16: Line 3 Touch-Up Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	3	16
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	33%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	33%	3	16
381073	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
381074	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	3	16
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	3	16
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	3	16
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	3	16
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	3	16
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	3	16
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	3	16
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	3	16
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	3	16
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	3	16
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	3	16
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	3	16
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	3	16
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	3	16
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	3	16
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	3	16
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	3	16
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	3	16
480972	Autocoat BT Toner B610	Topcoat	61%	3	16
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	3	16
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	3	16
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	3	16
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	3	16
509953	Autocoat BT Toner B627	Topcoat	61%	3	16
509957	Autocoat BT Toner B632	Topcoat	61%	3	16
509958	Autocoat BT Toner B649	Topcoat	61%	3	16
509959	Autocoat BT Toner B653	Topcoat	61%	3	16
509981	Autocoat BT Toner B664	Topcoat	61%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	24%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	24%	3	16
391191	Exempt Reducer	Reducer	15%	3	16
480460	AT105 Bus Reducer SRA	Reducer	15%	3	16
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	3	16
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	3	16
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	3	16
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic
volatile

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0					Metha	
			Uncontrolled Uncontrolled Limited						
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.06	0.25	COMG 003	0.01		

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene CAS# 100-97-6	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.11	0.50	COMG 003		0.03	0.67	2.92	COMG 003		0.08

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited			Uncontrolled	Uncontrolled	Limited
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

is the Max for a Single HAP

hexamethyler toluene Methyl Isobut Ethylbenzene Cumeme Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.583022

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 38 - Line 3 Paint Booth Air Make-Up
STRU 13: Line 3 Paint Booth
STRU 14: Line 3 Paint Booth

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input (MMBtu/hr)	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.93	1,887.3	16.5

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.189	0.83	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.159	0.69	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.014	0.06	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.014	0.06	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.014	0.06	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.010	0.05	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	226	992	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.004	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.004	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	228	998	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	9.44E-07	4.13E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.66E-07	7.29E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.96E-06	1.74E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	2.26E-06	9.92E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.42E-04	6.20E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	3.40E-03	1.49E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.15E-06	5.04E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	6.42E-06	2.81E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	3.77E-07	1.65E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	2.26E-08	9.92E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.08E-06	9.09E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.64E-06	1.16E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.59E-07	6.94E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	7.17E-07	3.14E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	4.91E-07	2.15E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	3.96E-06	1.74E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	4.53E-08	1.98E-07	COMG 003
Total HAPs =			1.56E-02		

Confirm EF

(lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶ scf)
8.82E-05	2-Methylnz	2.40E-05
2.10E-03	3-Methylcl	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracen	2.40E-06
3.40E-03	Benz(a)anl	1.80E-06
2.00E-04	Benzo(a)p	1.20E-06
1.20E-05	Benzo(b)fl	1.80E-06
1.10E-03	Benzo(g,h)	1.20E-06
1.40E-03	Benzo(k)fl	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a)	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanath	1.70E-05
	Pyrene	5.00E-06

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Job No. NA

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 39 - Line 3 Touch-Up Booth Air Make-Up
STRU 15: Line 3 Touch-Up Booth
STRU 16: Line 3 Touch-Up Booth

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	3.96	3,882.4	34.0

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.388	1.70	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.326	1.43	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.030	0.13	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.030	0.13	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.030	0.13	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.021	0.09	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	466	2041	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.009	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	469	2053	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	1.94E-06	8.50E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.42E-07	1.50E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.15E-06	3.57E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.66E-06	2.04E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	2.91E-04	1.28E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	6.99E-03	3.06E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.37E-06	1.04E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.32E-05	5.78E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	7.76E-07	3.40E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.66E-08	2.04E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.27E-06	1.87E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.44E-06	2.38E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.26E-07	1.43E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.48E-06	6.46E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.01E-06	4.42E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.15E-06	3.57E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	9.32E-08	4.08E-07	COMG 003
Total HAPs =			3.21E-02		

Confirm EF
(lb/10⁶ scf)

0.0005 POM EF (lb/10⁶
8.82E-05 2-Methyl 2.40E-05
2.10E-03 3-Methyl 1.80E-06
1.20E-03 7, 12-Dim 1.60E-05
7.50E-02 Acenaphth 1.80E-06
1.80E+00 Acenaphth 1.80E-06
6.10E-04 Anthracen 2.40E-06
3.40E-03 Benz(a)an 1.80E-06
2.00E-04 Benzo(a)p 1.20E-06
1.20E-05 Benzo(b)fl 1.80E-06
1.10E-03 Benzo(g,h 1.20E-06
1.40E-03 Benzo(k)fl 1.80E-06
8.40E-05 Chrysene 1.80E-06
3.80E-04 Dibenzo(a 1.20E-06
2.60E-04 Fluoranth 3.00E-06
2.10E-03 Fluorene 2.80E-06
2.40E-05 Indeno(1,2 1.80E-06
Phenanath 1.70E-05
Pyrene 5.00E-06

Notes:

- ^a Emission factors from AP-42 (07/98), Table 1.4-1
- ^b Emission factors from AP-42 (07/98), Table 1.4-2
- ^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- ^d Emission factors from AP-42 (07/98), Table 1.4-3
- ^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

McNeilus Truck & Manufacturing, Inc.

EQUI 40 - Line 4 Touch-Up Booth

TREA 31: Mat or Panel Filter (Line 4 Touch-Up Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 20: Line 4 Touch-Up Booth

STRU 21: Line 4 Touch-Up Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	3	16
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	33%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	33%	3	16
381073	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
381074	Autocryl LV EP Chassis Black	Topcoat	61%	3	16
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	3	16
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	3	16
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	3	16
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	3	16
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	3	16
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	3	16
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	3	16
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	3	16
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	3	16
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	3	16
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	3	16
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	3	16
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	3	16
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	3	16
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	3	16
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	3	16
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	3	16
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	3	16
480972	Autocoat BT Toner B610	Topcoat	61%	3	16
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	3	16
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	3	16
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	3	16
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	3	16
509953	Autocoat BT Toner B627	Topcoat	61%	3	16
509957	Autocoat BT Toner B632	Topcoat	61%	3	16
509958	Autocoat BT Toner B649	Topcoat	61%	3	16
509959	Autocoat BT Toner B653	Topcoat	61%	3	16
509981	Autocoat BT Toner B664	Topcoat	61%	3	16
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	3	16
384295	Autocryl LV EP Cip Hardener	Hardener	24%	3	16
480663	Autocoat BT LV650 Hardener	Hardener	24%	3	16
391191	Exempt Reducer	Reducer	15%	3	16
480460	AT105 Bus Reducer SRA	Reducer	15%	3	16
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	3	16
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	3	16
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	3	16
Max Em. Rate					

Conversions

128 ounces/gal

60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

or electrostatic/airless or HVLP application method estimated using MPCA coating guidance?

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic
volatile

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0					Metha	
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.06	0.25	COMG 003	0.01		

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8					Ethylbenzene	
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.11	0.50	COMG 003		0.03	0.67	2.92	COMG 003		0.08

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

is the Max for a Single HAP

hexamethyler toluene Methyl Isobut Ethylbenzene Cumeme Methanol Formaldehyde
0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.583022

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 41 - Line 4 Paint Booth Air Make-Up STRU 18: Line 4 Paint Booth STRU 19: Line 4 Paint Booth

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.93	1,887.3	16.5

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.189	0.83	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.159	0.69	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.014	0.06	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.014	0.06	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.014	0.06	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.010	0.05	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	226	992	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.004	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.004	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	228	998	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	9.44E-07	4.13E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.66E-07	7.29E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.96E-06	1.74E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	2.26E-06	9.92E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.42E-04	6.20E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	3.40E-03	1.49E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.15E-06	5.04E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	6.42E-06	2.81E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	3.77E-07	1.65E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	2.26E-08	9.92E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.08E-06	9.09E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.64E-06	1.16E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.59E-07	6.94E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	7.17E-07	3.14E-06	COMG 003
Mercury ^a	7439-97-6	2.55E-07	4.91E-07	2.15E-06	COMG 003
Nickel ^a	7440-02-0	2.06E-06	3.96E-06	1.74E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	4.53E-08	1.98E-07	COMG 003
Total HAPs =			1.56E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)ant	1.80E-06
2.00E-04	Benzo(a)py	1.20E-06
1.20E-05	Benzo(b)fl	1.80E-06
1.10E-03	Benzo(g,h	1.20E-06
1.40E-03	Benzo(k)fl	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanath	1.70E-05
	Pyrene	5.00E-06

Notes:

- Emission factors from AP-42 (07/98), Table 1.4-1
- Emission factors from AP-42 (07/98), Table 1.4-2
- Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- Emission factors from AP-42 (07/98), Table 1.4-3
- Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 42 - Line 4 Touch-Up Booth Air Make-Up
STRU 20: Line 4 Touch-Up Booth
STRU 21: Line 4 Touch-Up Booth

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	3.96	3,882.4	34.0

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.388	1.70	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.326	1.43	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.030	0.13	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.030	0.13	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.030	0.13	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.021	0.09	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	466	2041	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.009	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	469	2053	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	1.94E-06	8.50E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.42E-07	1.50E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.15E-06	3.57E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.66E-06	2.04E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	2.91E-04	1.28E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	6.99E-03	3.06E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.37E-06	1.04E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.32E-05	5.78E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	7.76E-07	3.40E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.66E-08	2.04E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.27E-06	1.87E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.44E-06	2.38E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.26E-07	1.43E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.48E-06	6.46E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.01E-06	4.42E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.15E-06	3.57E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	9.32E-08	4.08E-07	COMG 003
Total HAPs =			3.21E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracen	2.40E-06
3.40E-03	Benz(a)anl	1.80E-06
2.00E-04	Benzo(a)p	1.20E-06
1.20E-05	Benzo(b)fl	1.80E-06
1.10E-03	Benzo(g,h,	1.20E-06
1.40E-03	Benzo(k)fl	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanath	1.70E-05
	Pyrene	5.00E-06

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

McNeilus Truck & Manufacturing, Inc.

EQUI 43 - Line 5 Touch-Up Booth

TREA 32: Mat or Panel Filter (Line 5 Touch-Up

Filter Control Eff.: PM, PM10, and PM2.5 = 85% 85.0% 85.0%

STRU 24: Line 5 Touch-Up Booth

STRU 25: Line 5 Touch-Up Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun	Maximum	Material
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)	Spray Rate (gal/hr)	Density (lb/gal)
483378	Autocoat LV360Primer EP Grey	Primer	67%	3	16	22.50	12.93
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	3	16	22.50	14.33
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	3	16	22.50	7.69
384295	Autocryl LV EP Cip Hardener	Hardener	33%	3	16	22.50	7.69
480663	Autocoat BT LV650 Hardener	Hardener	33%	3	16	22.50	9.10
381073	Autocryl LV EP Chassis Black	Topcoat	61%	3	16	22.50	12.74
381074	Autocryl LV EP Chassis Black	Topcoat	61%	3	16	22.50	12.74
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	3	16	22.50	8.60
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	3	16	22.50	8.81
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	3	16	22.50	8.98
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	3	16	22.50	10.48
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	3	16	22.50	9.66
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	3	16	22.50	8.80
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	3	16	22.50	8.57
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	3	16	22.50	9.37
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	3	16	22.50	8.15
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	3	16	22.50	8.11
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	3	16	22.50	8.16
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	3	16	22.50	10.78
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	3	16	22.50	12.48
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	3	16	22.50	7.22
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	3	16	22.50	9.51
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	3	16	22.50	9.50
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	3	16	22.50	9.00
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	3	16	22.50	12.45
480972	Autocoat BT Toner B610	Topcoat	61%	3	16	22.50	15.00
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	3	16	22.50	9.00
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	3	16	22.50	10.21
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	3	16	22.50	11.85
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	3	16	22.50	12.11
509953	Autocoat BT Toner B627	Topcoat	61%	3	16	22.50	8.95
509957	Autocoat BT Toner B632	Topcoat	61%	3	16	22.50	9.31
509958	Autocoat BT Toner B649	Topcoat	61%	3	16	22.50	12.14
509959	Autocoat BT Toner B653	Topcoat	61%	3	16	22.50	8.82
509981	Autocoat BT Toner B664	Topcoat	61%	3	16	22.50	8.81
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	3	16	22.50	7.69
384295	Autocryl LV EP Cip Hardener	Hardener	24%	3	16	22.50	7.69
480663	Autocoat BT LV650 Hardener	Hardener	24%	3	16	22.50	9.10
391191	Exempt Reducer	Reducer	15%	3	16	22.50	7.19
480460	AT105 Bus Reducer SRA	Reducer	15%	3	16	22.50	7.25
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	3	16	22.50	6.89
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	3	16	22.50	6.86
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	3	16	22.50	7.07
Max Em. Rate							

Transfer	VOC	VOC	VOC	VOC	VOC	Solids	Solids	PM/PM ₁₀	PM/PM ₁₀	PM/PM ₁₀
Efficiency	Content	Content	Uncontrolled	Uncontrolled	Limited	Content	Content	Uncontrolled	Uncontrolled	Limited
(%)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(lb/hr)
75%	20.50%	2.65	39.96	175.02	COMG 003	79.71%	10.31	38.84	170.13	5.83
75%	17.93%	2.57	38.74	169.69	COMG 003	82.10%	11.76	44.34	194.21	6.65
75%	67.90%	5.22	38.77	169.81	COMG 003	32.30%	2.48	4.61	20.19	0.69
75%	67.90%	5.22	38.77	169.81	COMG 003	32.30%	2.48	4.61	20.19	0.69
75%	15.20%	1.38	10.27	44.98	COMG 003	85.00%	7.74	14.36	62.89	2.15
75%	21.11%	2.69	36.92	161.71	COMG 003	79.00%	10.06	34.53	151.26	5.18
75%	21.11%	2.69	36.92	161.71	COMG 003	79.00%	10.06	34.53	151.26	5.18
75%	36.40%	3.13	42.96	188.19	COMG 003	64.00%	5.50	18.89	82.72	2.83
75%	33.60%	2.96	40.63	177.95	COMG 003	66.50%	5.86	20.10	88.05	3.02
75%	35.80%	3.21	44.12	193.26	COMG 003	64.30%	5.77	19.81	86.78	2.97
75%	30.50%	3.20	43.87	192.15	COMG 003	70.00%	7.34	25.17	110.25	3.78
75%	32.71%	3.16	43.37	189.96	COMG 003	67.40%	6.51	22.34	97.85	3.35
75%	35.23%	3.10	42.55	186.36	COMG 003	65.00%	5.72	19.63	85.97	2.94
75%	36.70%	3.15	43.17	189.07	COMG 003	63.30%	5.42	18.61	81.53	2.79
75%	33.50%	3.14	43.08	188.70	COMG 003	67.00%	6.28	21.54	94.35	3.23
75%	47.98%	3.91	53.66	235.05	COMG 003	52.00%	4.24	14.54	63.69	2.18
75%	54.50%	4.42	60.66	265.71	COMG 003	46.00%	3.73	12.80	56.07	1.92
75%	44.49%	3.63	49.82	218.22	COMG 003	55.00%	4.49	15.40	67.45	2.31
75%	30.80%	3.32	45.57	199.58	COMG 003	69.00%	7.44	25.52	111.79	3.83
75%	26.10%	3.26	44.71	195.81	COMG 003	74.10%	9.25	31.73	138.98	4.76
75%	100.20%	7.23	99.29	434.90	COMG 003	0.00%	0.00	0.00	0.00	0.00
75%	34.38%	3.27	44.88	196.58	COMG 003	65.62%	6.24	21.41	93.79	3.21
75%	34.32%	3.26	44.74	195.98	COMG 003	66.00%	6.27	21.51	94.23	3.23
75%	37.00%	3.33	45.70	200.18	COMG 003	63.00%	5.67	19.46	85.21	2.92
75%	24.58%	3.06	42.00	183.95	COMG 003	75.42%	9.39	32.22	141.12	4.83
75%	17.40%	2.61	35.82	156.90	COMG 003	83.00%	12.45	42.72	187.11	6.41
75%	35.70%	3.21	44.10	193.15	COMG 003	64.00%	5.76	19.76	86.57	2.96
75%	44.86%	4.58	62.86	275.33	COMG 003	55.20%	5.64	19.34	84.70	2.90
75%	27.51%	3.26	44.74	195.98	COMG 003	73.00%	8.65	29.68	130.01	4.45
75%	27.00%	3.27	44.88	196.56	COMG 003	73.00%	8.84	30.33	132.86	4.55
75%	33.63%	3.01	41.31	180.95	COMG 003	66.40%	5.94	20.39	89.31	3.06
75%	33.70%	3.14	43.06	188.61	COMG 003	66.20%	6.16	21.15	92.63	3.17
75%	24.88%	3.02	41.45	181.55	COMG 003	75.20%	9.13	31.32	137.20	4.70
75%	35.90%	3.17	43.46	190.35	COMG 003	64.20%	5.66	19.43	85.10	2.91
75%	34.40%	3.03	41.60	182.19	COMG 003	66.00%	5.81	19.95	87.39	2.99
75%	67.90%	5.22	28.20	123.50	COMG 003	32.30%	2.48	3.35	14.69	0.50
75%	67.90%	5.22	28.20	123.50	COMG 003	32.30%	2.48	3.35	14.69	0.50
75%	15.20%	1.38	7.47	32.72	COMG 003	85.00%	7.74	10.44	45.74	1.57
75%	100.00%	7.19	24.27	106.29	COMG 003	0.00%	0.00	0.00	0.00	0.00
75%	95.86%	6.95	23.46	102.74	COMG 003	4.20%	0.30	0.26	1.13	0.04
75%	100.00%	6.89	23.25	101.85	COMG 003	37.50%	2.58	2.18	9.55	0.33
75%	90.00%	6.17	20.84	91.27	COMG 003	10.00%	0.69	0.58	2.54	0.09
75%	98.50%	6.96	23.50	102.94	COMG 003	2.00%	0.14	0.12	0.52	0.02
			151.76	664.69	237.00			58.70	257.09	8.80

HAP-Organic
volatile

PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)	PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Formaldehyde CAS# 50-00-0			
							(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)
25.52	79.71%	10.31	38.84	170.13	5.83	25.52	0.00%	0.00	0.00	0.00
29.13	82.10%	11.76	44.34	194.21	6.65	29.13	0.00%	0.00	0.00	0.00
3.03	32.30%	2.48	4.61	20.19	0.69	3.03	0.10%	0.01	0.06	0.25
3.03	32.30%	2.48	4.61	20.19	0.69	3.03	0.10%	0.01	0.06	0.25
9.43	85.00%	7.74	14.36	62.89	2.15	9.43	0.00%	0.00	0.00	0.00
22.69	79.00%	10.06	34.53	151.26	5.18	22.69	0.00%	0.00	0.00	0.00
22.69	79.00%	10.06	34.53	151.26	5.18	22.69	0.00%	0.00	0.00	0.00
12.41	64.00%	5.50	18.89	82.72	2.83	12.41	0.00%	0.00	0.00	0.00
13.21	66.50%	5.86	20.10	88.05	3.02	13.21	0.00%	0.00	0.00	0.00
13.02	64.30%	5.77	19.81	86.78	2.97	13.02	0.00%	0.00	0.00	0.00
16.54	70.00%	7.34	25.17	110.25	3.78	16.54	0.00%	0.00	0.00	0.00
14.68	67.40%	6.51	22.34	97.85	3.35	14.68	0.00%	0.00	0.00	0.00
12.89	65.00%	5.72	19.63	85.97	2.94	12.89	0.00%	0.00	0.00	0.00
12.23	63.30%	5.42	18.61	81.53	2.79	12.23	0.00%	0.00	0.00	0.00
14.15	67.00%	6.28	21.54	94.35	3.23	14.15	0.00%	0.00	0.00	0.00
9.55	52.00%	4.24	14.54	63.69	2.18	9.55	0.00%	0.00	0.00	0.00
8.41	46.00%	3.73	12.80	56.07	1.92	8.41	0.00%	0.00	0.00	0.00
10.12	55.00%	4.49	15.40	67.45	2.31	10.12	0.00%	0.00	0.00	0.00
16.77	69.00%	7.44	25.52	111.79	3.83	16.77	0.00%	0.00	0.00	0.00
20.85	74.10%	9.25	31.73	138.98	4.76	20.85	0.00%	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
14.07	65.62%	6.24	21.41	93.79	3.21	14.07	0.00%	0.00	0.00	0.00
14.13	66.00%	6.27	21.51	94.23	3.23	14.13	0.00%	0.00	0.00	0.00
12.78	63.00%	5.67	19.46	85.21	2.92	12.78	0.00%	0.00	0.00	0.00
21.17	75.42%	9.39	32.22	141.12	4.83	21.17	0.00%	0.00	0.00	0.00
28.07	83.00%	12.45	42.72	187.11	6.41	28.07	0.00%	0.00	0.00	0.00
12.98	64.00%	5.76	19.76	86.57	2.96	12.98	0.00%	0.00	0.00	0.00
12.71	55.20%	5.64	19.34	84.70	2.90	12.71	0.00%	0.00	0.00	0.00
19.50	73.00%	8.65	29.68	130.01	4.45	19.50	0.00%	0.00	0.00	0.00
19.93	73.00%	8.84	30.33	132.86	4.55	19.93	0.00%	0.00	0.00	0.00
13.40	66.40%	5.94	20.39	89.31	3.06	13.40	0.00%	0.00	0.00	0.00
13.89	66.20%	6.16	21.15	92.63	3.17	13.89	0.00%	0.00	0.00	0.00
20.58	75.20%	9.13	31.32	137.20	4.70	20.58	0.00%	0.00	0.00	0.00
12.77	64.20%	5.66	19.43	85.10	2.91	12.77	0.00%	0.00	0.00	0.00
13.11	66.00%	5.81	19.95	87.39	2.99	13.11	0.00%	0.00	0.00	0.00
2.20	32.30%	2.48	3.35	14.69	0.50	2.20	0.10%	0.01	0.04	0.18
2.20	32.30%	2.48	3.35	14.69	0.50	2.20	0.10%	0.01	0.04	0.18
6.86	85.00%	7.74	10.44	45.74	1.57	6.86	0.00%	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00
0.17	4.20%	0.30	0.26	1.13	0.04	0.17	0.00%	0.00	0.00	0.00
1.43	37.50%	2.58	2.18	9.55	0.33	1.43	0.00%	0.00	0.00	0.00
0.38	10.00%	0.69	0.58	2.54	0.09	0.38	0.00%	0.00	0.00	0.00
0.08	2.00%	0.14	0.12	0.52	0.02	0.08	0.00%	0.00	0.00	0.00
COMG 003			58.70	257.09	8.80	COMG 003		0.00	0.06	0.25

HAP-Organic
volatile

HAP-Organic
volatile

Limited (ton/yr)	Methanol CAS# 67-56-1					Limited (ton/yr)	Cumeme CAS# 98-82-8					Limited (ton/yr)
	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.25	0.20%	0.02	0.11	0.50	0.50	0.25	0.00%	0.00	0.00	0.00	0.00	0.00
0.25	0.20%	0.02	0.11	0.50	0.50	0.25	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	1.03
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	1.06
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	1.08
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	1.26
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.58
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	1.06
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	1.03
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	1.13
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	1.47
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	1.46
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.98
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.65
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.75
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	2.17
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	1.14
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	1.62
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.90
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	1.08
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.61
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.71
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.73
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	1.08
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	1.12
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	2.12
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	2.12
0.18	0.20%	0.02	0.08	0.36	0.36	0.18	0.00%	0.00	0.00	0.00	0.00	0.00
0.18	0.20%	0.02	0.08	0.36	0.36	0.18	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	0.75
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
COMG 003	0.01	0.11	0.50	COMG 003	0.03	0.67	2.92	COMG 003				

HAP-Organ
volatile

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HAP-Organic
volatile

Max Organic HAP Emissions by M
All worst case Glycol Ethyl xylene
2.70 2.3373 1.544

HAP-Organic
volatile

ylene CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

Mix that is the Max for a Single HAP

hexamethyltoluene Methyl Isobut Ethylbenze Cumemr Methanol Formaldehyde
0.510121 1.549345 2.215551 1.5493 2.339 1.569949 1.583022

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 44 - Line 5 Paint Booth Air Make-Up STRU 22: Line 5 Paint Booth STRU 23: Line 5 Paint Booth

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	2.20	2,156.9	18.9

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.216	0.94	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.181	0.79	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.016	0.07	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.016	0.07	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.016	0.07	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.012	0.05	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	259	1134	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.005	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.005	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	260	1140	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	1.08E-06	4.72E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.90E-07	8.33E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	4.53E-06	1.98E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	2.59E-06	1.13E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.62E-04	7.09E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	3.88E-03	1.70E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.32E-06	5.76E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	7.33E-06	3.21E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	4.31E-07	1.89E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	2.59E-08	1.13E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.37E-06	1.04E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	3.02E-06	1.32E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.81E-07	7.94E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	8.20E-07	3.59E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	5.61E-07	2.46E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	4.53E-06	1.98E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	5.18E-08	2.27E-07	COMG 003
Total HAPs =			1.78E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methyln	2.40E-05
2.10E-03	3-Methylc	1.80E-06
1.20E-03	7, 12-Dim	1.60E-05
7.50E-02	Acenaphtl	1.80E-06
1.80E+00	Acenaphtl	1.80E-06
6.10E-04	Anthracen	2.40E-06
3.40E-03	Benz(a)ar	1.80E-06
2.00E-04	Benzo(a)j	1.20E-06
1.20E-05	Benzo(b)f	1.80E-06
1.10E-03	Benzo(g,h	1.20E-06
1.40E-03	Benzo(k)f	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanati	1.70E-05
	Pyrene	5.00E-06

Notes:

- Emission factors from AP-42 (07/98), Table 1.4-1
- Emission factors from AP-42 (07/98), Table 1.4-2
- Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- Emission factors from AP-42 (07/98), Table 1.4-3
- Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 45 - Line 5 Touch-Up Booth Air Make-Up STRU 24: Line 5 Touch-Up Booth STRU 25: Line 5 Touch-Up Booth

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	3.96	3,882.4	34.0

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.388	1.70	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.326	1.43	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.030	0.13	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.030	0.13	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.030	0.13	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.021	0.09	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	466	2041	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.009	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	469	2053	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	1.94E-06	8.50E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.42E-07	1.50E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.15E-06	3.57E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.66E-06	2.04E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	2.91E-04	1.28E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	6.99E-03	3.06E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.37E-06	1.04E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.32E-05	5.78E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	7.76E-07	3.40E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.66E-08	2.04E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.27E-06	1.87E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.44E-06	2.38E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.26E-07	1.43E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.48E-06	6.46E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.01E-06	4.42E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.15E-06	3.57E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	9.32E-08	4.08E-07	COMG 003
Total HAPs =			3.21E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylr	2.40E-05
2.10E-03	3-Methylc	1.80E-06
1.20E-03	7, 12-Dirr	1.60E-05
7.50E-02	Acenaphl	1.80E-06
1.80E+00	Acenaphl	1.80E-06
6.10E-04	Anthrace	2.40E-06
3.40E-03	Benz(a)a	1.80E-06
2.00E-04	Benzo(a)	1.20E-06
1.20E-05	Benzo(b)	1.80E-06
1.10E-03	Benzo(g,l	1.20E-06
1.40E-03	Benzo(k)	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(i	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,	1.80E-06
	Phenana	1.70E-05
	Pyrene	5.00E-06

Notes:

- Emission factors from AP-42 (07/98), Table 1.4-1
- Emission factors from AP-42 (07/98), Table 1.4-2
- Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- Emission factors from AP-42 (07/98), Table 1.4-3
- Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI46 - Line 6 Paint and Touch-Up Booth Air Make-Up STRU 57: Line 6 Paint & Touch-Up Booth STRU 58: Line 6 Paint & Touch-Up Booth

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.36	4,270.6	37.4

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.427	1.87	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.359	1.57	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.032	0.14	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.032	0.14	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.032	0.14	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.023	0.10	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.003	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	512	2245	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.010	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	516	2258	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	2.14E-06	9.35E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.77E-07	1.65E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.97E-06	3.93E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	5.12E-06	2.24E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	3.20E-04	1.40E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	7.69E-03	3.37E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.61E-06	1.14E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.45E-05	6.36E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	8.54E-07	3.74E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	5.12E-08	2.24E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.70E-06	2.06E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.98E-06	2.62E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.59E-07	1.57E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.62E-06	7.11E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.11E-06	4.86E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.97E-06	3.93E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	1.02E-07	4.49E-07	COMG 003
Total HAPs =			3.53E-02		

Confirm EF
(lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylnaph	2.40E-05
2.10E-03	3-Methylchlor	1.80E-06
1.20E-03	7, 12-Dimeth	1.60E-05
7.50E-02	Acenaphthen	1.80E-06
1.80E+00	Acenaphthyle	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)anthr	1.80E-06
2.00E-04	Benzo(a)pyre	1.20E-06
1.20E-05	Benzo(b)fluor	1.80E-06
1.10E-03	Benzo(g,h,i)p	1.20E-06
1.40E-03	Benzo(k)fluor	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h)	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-	1.80E-06
	Phenanthrene	1.70E-05
	Pyrene	5.00E-06

Notes:

- ^a Emission factors from AP-42 (07/98), Table 1.4-1
- ^b Emission factors from AP-42 (07/98), Table 1.4-2
- ^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- ^d Emission factors from AP-42 (07/98), Table 1.4-3
- ^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 58: High Flow Line Oven
STRU 65: High Flow Line Oven

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.50	1,470.6	12.9

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.147	0.64	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.124	0.54	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.011	0.05	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.011	0.05	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.011	0.05	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.008	0.04	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	176	773	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.003	0.01	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.003	0.01	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	178	778	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	7.35E-07	3.22E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.30E-07	5.68E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.09E-06	1.35E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	1.76E-06	7.73E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.10E-04	4.83E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	2.65E-03	1.16E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	8.97E-07	3.93E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	5.00E-06	2.19E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	2.94E-07	1.29E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	1.76E-08	7.73E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	1.62E-06	7.09E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.06E-06	9.02E-06	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.24E-07	5.41E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	5.59E-07	2.45E-06	COMG 003
Mercury ^a	7439-97-6	2.55E-07	3.82E-07	1.67E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	3.09E-06	1.35E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	3.53E-08	1.55E-07	COMG 003
Total HAPs =			1.22E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶ scf)
8.82E-05	2-Methylnap	2.40E-05
2.10E-03	3-Methylchloro	1.80E-06
1.20E-03	7, 12-Dimeth	1.60E-05
7.50E-02	Acenaphther	1.80E-06
1.80E+00	Acenaphthyl	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)anthr	1.80E-06
2.00E-04	Benzo(a)pyre	1.20E-06
1.20E-05	Benzo(b)fluor	1.80E-06
1.10E-03	Benzo(g,h,i)fl	1.20E-06
1.40E-03	Benzo(k)fluor	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h)	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-cd)	1.80E-06
	Phenanthrene	1.70E-05
	Pyrene	5.00E-06

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 59 - Line 6 Curing Oven
STRU 61: Line 6 Curing Oven

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	7.10	6,960.8	61.0

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.696	3.05	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.585	2.56	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.053	0.23	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.053	0.23	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.053	0.23	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.038	0.17	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.004	0.02	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	835	3659	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.015	0.07	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.016	0.07	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	840	3680	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	3.48E-06	1.52E-05	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	6.14E-07	2.69E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	1.46E-05	6.40E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	8.35E-06	3.66E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	5.22E-04	2.29E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	1.25E-02	5.49E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	4.25E-06	1.86E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	2.37E-05	1.04E-04	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	1.39E-06	6.10E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	8.35E-08	3.66E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	7.66E-06	3.35E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	9.75E-06	4.27E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	5.85E-07	2.56E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	2.65E-06	1.16E-05	COMG 003
Mercury ^a	7439-97-6	2.55E-07	1.81E-06	7.93E-06	COMG 003
Nickel ^a	7440-02-0	2.06E-06	1.46E-05	6.40E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	1.67E-07	7.32E-07	COMG 003
Total HAPs =			5.76E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylnaph	2.40E-05
2.10E-03	3-Methylchlor	1.80E-06
1.20E-03	7, 12-Dimethy	1.60E-05
7.50E-02	Acenaphthene	1.80E-06
1.80E+00	Acenaphthyl	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)anthra	1.80E-06
2.00E-04	Benzo(a)pyr	1.20E-06
1.20E-05	Benzo(b)fluor	1.80E-06
1.10E-03	Benzo(g,h,i)pe	1.20E-06
1.40E-03	Benzo(k)fluor	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h)a	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-c	1.80E-06
	Phenanathren	1.70E-05
	Pyrene	5.00E-06

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 62 - Total Facility Space Heaters

Computed	
Checked	
Sheets	1

The combustion type insignificant activities (space heaters) are included in the permit as EQUI 62 for emissions inventory purposes. When these insignificant activities emissions are combined together, the NOx and CO PTE is significant as shown in the Table below. Units should not be allowed to remain IAs if they are significant sources of emissions for a facility (Minn. R. 7019.3020(A)). However, McNeilus has explained that a single meter tracks all the natural gas usage at the facility, so it is not feasible to track the emissions from the individual space heaters. Therefore, all these units are tracked as a single emissions unit (EQUI 62) for emissions inventory purposes. A list of space heaters is included in Attachment 4 of the TSD.

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	71.10	69,705.9	610.6

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	6.971	30.53	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	5.855	25.65	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.530	2.32	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.530	2.32	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.530	2.32	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.383	1.68	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.042	0.18	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	8365	36637	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.153	0.67	COMG 003
Methane (CH ₄) ^b	74-82-8	2.25E-03	0.160	0.70	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	8414	36855	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	3.49E-05	1.53E-04	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	6.15E-06	2.69E-05	COMG 003
Benzene ^d	71-43-2	2.06E-06	1.46E-04	6.41E-04	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	8.36E-05	3.66E-04	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	5.23E-03	2.29E-02	COMG 003
Hexane ^d	110-54-3	1.76E-03	1.25E-01	5.50E-01	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	4.25E-05	1.86E-04	COMG 003
Toluene ^d	108-88-3	3.33E-06	2.37E-04	1.04E-03	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	1.39E-05	6.11E-05	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	8.36E-07	3.66E-06	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	7.67E-05	3.36E-04	COMG 003
Chromium ^e	7440-47-3	1.37E-06	9.76E-05	4.27E-04	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	5.86E-06	2.56E-05	COMG 003
Manganese ^e	7439-96-5	3.73E-07	2.65E-05	1.16E-04	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.81E-05	7.94E-05	COMG 003
Nickel ^e	7440-02-0	2.06E-06	1.46E-04	6.41E-04	COMG 003
Selenium ^e	7782-49-2	2.35E-08	1.67E-06	7.33E-06	COMG 003
Total HAPs =				5.77E-01	

Notes:

- ^a Emission factors from AP-42 (07/98), Table 1.4-1
- ^b Emission factors from AP-42 (07/98), Table 1.4-2
- ^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.
- ^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

	(lb/10 ⁶ scf)		
Nitrogen Oxides (NO _x) ^a	100	Small Boiler, uncontrolled	
Carbon Monoxide (CO) ^a	84	Small Boiler, uncontrolled	
Particulate Matter (PM) ^b	7.6		
Particulate Matter < 10 Microns (PM ₁₀) ^b	7.6	POM	EF (lb/10 ⁶ scf)
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	7.6	2-Methylnaphthalene	2.40E-05
Volatile Organic Compounds (VOC) ^b	5.5	3-Methylchlorobenzene	1.80E-06
Sulfur Dioxide (SO ₂) ^b	0.6	7, 12-Dimethylbenzofuran	1.60E-05
Carbon Dioxide (CO ₂) ^b	120000	Acenaphthene	1.80E-06
Nitrous Oxide (N ₂ O) ^b	2.2	Acenaphthylene	1.80E-06
Methane (CH ₄) ^b	2.3	Anthracene	2.40E-06
Lead ^b	0.0005	Benz(a)anthracene	1.80E-06
Polycyclic Organic Matter (POM) ^d	0.0000882	Benzo(a)pyrene	1.20E-06
Benzene ^d	0.0021	Benzo(b)fluoranthene	1.80E-06
Dichlorobenzene ^d	0.0012	Benzo(g,h,i)perylene	1.20E-06
Formaldehyde ^d	0.075	Benzo(k)fluoranthene	1.80E-06
Hexane ^d	1.8	Chrysene	1.80E-06
Naphthalene ^d	0.00061	Dibenzo(a,h)anthracene	1.20E-06
Toluene ^d	0.0034	Fluoranthene	3.00E-06
Arsenic ^e	0.0002	Fluorene	2.80E-06
Beryllium ^e	0.000012	Indeno(1,2,3-cd)pyrene	1.80E-06
Cadmium ^e	0.0011	Phenanthrene	1.70E-05
Chromium ^e	0.0014	Pyrene	5.00E-06
Cobalt ^e	0.000084		
Manganese ^e	0.00038	Total	8.82E-05
Mercury ^e	0.00026		
Nickel ^e	0.0021		
Selenium ^e	0.000024		

McNeilus Truck & Manufacturing, Inc.
EQUI 70 - Monorail Small Parts Booth
No Controls

Filter Control Eff.: PM and PM₁₀ 0%; PM_{2.5} 0%

0.0%

0.0%

STRU 85 - Monorail Small Parts Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun	Maximum	Material	Transfer
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)	Spray Rate (gal/hr)	Density (lb/gal)	Efficiency (%)
483378	Autocoat LV360Primer EP Grey	Primer	67%	1	0.8	0.08	12.93	75%
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	1	0.8	0.08	14.33	75%
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	1	0.8	0.08	7.69	75%
384295	Autocryl LV EP Cip Hardener	Hardener	33%	1	0.8	0.08	7.69	75%
480663	Autocoat BT LV650 Hardener	Hardener	33%	1	0.8	0.08	9.10	75%
381073	Autocryl LV EP Chassis Black	Topcoat	61%	1	0.8	0.08	12.74	75%
381074	Autocryl LV EP Chassis Black	Topcoat	61%	1	0.8	0.08	12.74	75%
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	1	0.8	0.08	8.60	75%
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	1	0.8	0.08	8.81	75%
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	1	0.8	0.08	8.98	75%
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	1	0.8	0.08	10.48	75%
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	1	0.8	0.08	9.66	75%
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	1	0.8	0.08	8.80	75%
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	1	0.8	0.08	8.57	75%
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	1	0.8	0.08	9.37	75%
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	1	0.8	0.08	8.15	75%
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	1	0.8	0.08	8.11	75%
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	1	0.8	0.08	8.16	75%
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	1	0.8	0.08	10.78	75%
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	1	0.8	0.08	12.48	75%
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	1	0.8	0.08	7.22	75%
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	1	0.8	0.08	9.51	75%
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	1	0.8	0.08	9.50	75%
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	1	0.8	0.08	9.00	75%
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	1	0.8	0.08	12.45	75%
480972	Autocoat BT Toner B610	Topcoat	61%	1	0.8	0.08	15.00	75%
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	1	0.8	0.08	9.00	75%
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	1	0.8	0.08	10.21	75%
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	1	0.8	0.08	11.85	75%
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	1	0.8	0.08	12.11	75%
509953	Autocoat BT Toner B627	Topcoat	61%	1	0.8	0.08	8.95	75%
509957	Autocoat BT Toner B632	Topcoat	61%	1	0.8	0.08	9.31	75%
509958	Autocoat BT Toner B649	Topcoat	61%	1	0.8	0.08	12.14	75%
509959	Autocoat BT Toner B653	Topcoat	61%	1	0.8	0.08	8.82	75%
509981	Autocoat BT Toner B664	Topcoat	61%	1	0.8	0.08	8.81	75%
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	1	0.8	0.08	7.69	75%
384295	Autocryl LV EP Cip Hardener	Hardener	24%	1	0.8	0.08	7.69	75%
480663	Autocoat BT LV650 Hardener	Hardener	24%	1	0.8	0.08	9.10	75%
391191	Exempt Reducer	Reducer	15%	1	0.8	0.08	7.19	75%
480460	AT105 Bus Reducer SRA	Reducer	15%	1	0.8	0.08	7.25	75%
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	1	0.8	0.08	6.89	75%
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	1	0.8	0.08	6.86	75%
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	1	0.8	0.08	7.07	75%
Max Em. Rate								

Conversions

128 ounces/gal
60 min/hr

*Minimum transfer efficiency from applicable federal regulation, site specific data or minimum transfer efficiency for electrostatic/airless or HVLP applica

VOC	VOC	VOC	VOC	VOC	Solids	Solids	PM/PM ₁₀	PM/PM ₁₀	PM/PM ₁₀	PM/PM ₁₀	Solids
Content	Content	Uncontrolled	Uncontrolled	Limited	Content	Content	Uncontrolled	Uncontrolled	Limited	Limited	Content
(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(%Wt)
20.50%	2.65	0.13	0.58	COMG 003	79.71%	10.31	0.13	0.57	0.13	0.57	79.71%
17.93%	2.57	0.13	0.57	COMG 003	82.10%	11.76	0.15	0.65	0.15	0.65	82.10%
67.90%	5.22	0.13	0.57	COMG 003	32.30%	2.48	0.02	0.07	0.02	0.07	32.30%
67.90%	5.22	0.13	0.57	COMG 003	32.30%	2.48	0.02	0.07	0.02	0.07	32.30%
15.20%	1.38	0.03	0.15	COMG 003	85.00%	7.74	0.05	0.21	0.05	0.21	85.00%
21.11%	2.69	0.12	0.54	COMG 003	79.00%	10.06	0.12	0.50	0.12	0.50	79.00%
21.11%	2.69	0.12	0.54	COMG 003	79.00%	10.06	0.12	0.50	0.12	0.50	79.00%
36.40%	3.13	0.14	0.63	COMG 003	64.00%	5.50	0.06	0.28	0.06	0.28	64.00%
33.60%	2.96	0.14	0.59	COMG 003	66.50%	5.86	0.07	0.29	0.07	0.29	66.50%
35.80%	3.21	0.15	0.64	COMG 003	64.30%	5.77	0.07	0.29	0.07	0.29	64.30%
30.50%	3.20	0.15	0.64	COMG 003	70.00%	7.34	0.08	0.37	0.08	0.37	70.00%
32.71%	3.16	0.14	0.63	COMG 003	67.40%	6.51	0.07	0.33	0.07	0.33	67.40%
35.23%	3.10	0.14	0.62	COMG 003	65.00%	5.72	0.07	0.29	0.07	0.29	65.00%
36.70%	3.15	0.14	0.63	COMG 003	63.30%	5.42	0.06	0.27	0.06	0.27	63.30%
33.50%	3.14	0.14	0.63	COMG 003	67.00%	6.28	0.07	0.31	0.07	0.31	67.00%
47.98%	3.91	0.18	0.78	COMG 003	52.00%	4.24	0.05	0.21	0.05	0.21	52.00%
54.50%	4.42	0.20	0.89	COMG 003	46.00%	3.73	0.04	0.19	0.04	0.19	46.00%
44.49%	3.63	0.17	0.73	COMG 003	55.00%	4.49	0.05	0.22	0.05	0.22	55.00%
30.80%	3.32	0.15	0.67	COMG 003	69.00%	7.44	0.09	0.37	0.09	0.37	69.00%
26.10%	3.26	0.15	0.65	COMG 003	74.10%	9.25	0.11	0.46	0.11	0.46	74.10%
100.20%	7.23	0.33	1.45	COMG 003	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%
34.38%	3.27	0.15	0.66	COMG 003	65.62%	6.24	0.07	0.31	0.07	0.31	65.62%
34.32%	3.26	0.15	0.65	COMG 003	66.00%	6.27	0.07	0.31	0.07	0.31	66.00%
37.00%	3.33	0.15	0.67	COMG 003	63.00%	5.67	0.06	0.28	0.06	0.28	63.00%
24.58%	3.06	0.14	0.61	COMG 003	75.42%	9.39	0.11	0.47	0.11	0.47	75.42%
17.40%	2.61	0.12	0.52	COMG 003	83.00%	12.45	0.14	0.62	0.14	0.62	83.00%
35.70%	3.21	0.15	0.64	COMG 003	64.00%	5.76	0.07	0.29	0.07	0.29	64.00%
44.86%	4.58	0.21	0.92	COMG 003	55.20%	5.64	0.06	0.28	0.06	0.28	55.20%
27.51%	3.26	0.15	0.65	COMG 003	73.00%	8.65	0.10	0.43	0.10	0.43	73.00%
27.00%	3.27	0.15	0.66	COMG 003	73.00%	8.84	0.10	0.44	0.10	0.44	73.00%
33.63%	3.01	0.14	0.60	COMG 003	66.40%	5.94	0.07	0.30	0.07	0.30	66.40%
33.70%	3.14	0.14	0.63	COMG 003	66.20%	6.16	0.07	0.31	0.07	0.31	66.20%
24.88%	3.02	0.14	0.61	COMG 003	75.20%	9.13	0.10	0.46	0.10	0.46	75.20%
35.90%	3.17	0.14	0.63	COMG 003	64.20%	5.66	0.06	0.28	0.06	0.28	64.20%
34.40%	3.03	0.14	0.61	COMG 003	66.00%	5.81	0.07	0.29	0.07	0.29	66.00%
67.90%	5.22	0.09	0.41	COMG 003	32.30%	2.48	0.01	0.05	0.01	0.05	32.30%
67.90%	5.22	0.09	0.41	COMG 003	32.30%	2.48	0.01	0.05	0.01	0.05	32.30%
15.20%	1.38	0.02	0.11	COMG 003	85.00%	7.74	0.03	0.15	0.03	0.15	85.00%
100.00%	7.19	0.08	0.35	COMG 003	0.00%	0.00	0.00	0.00	0.00	0.00	0.00%
95.86%	6.95	0.08	0.34	COMG 003	4.20%	0.30	0.00	0.00	0.00	0.00	4.20%
100.00%	6.89	0.08	0.34	COMG 003	37.50%	2.58	0.01	0.03	0.01	0.03	37.50%
90.00%	6.17	0.07	0.30	COMG 003	10.00%	0.69	0.00	0.01	0.00	0.01	10.00%
98.50%	6.96	0.08	0.34	COMG 003	2.00%	0.14	0.00	0.00	0.00	0.00	2.00%
		0.51	2.22	237.00			0.20	0.86	0.20	COMG 003	

ation method estimated using MPCA coating guidance?

HAP-Organic

HAP-Organic

volatile					volatile							
Solids	PM _{2.5}	PM _{2.5}	PM _{2.5}	PM _{2.5}	Formaldehyde CAS# 50-00-0					Methanol CAS# 67		
Content	Uncontrolled	Uncontrolled	Limited	Limited		Uncontrolled		Uncontrolled	Limited		Uncontrolled	
(lb/gal)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)
10.31	0.13	0.57	0.13	0.57	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
11.76	0.15	0.65	0.15	0.65	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
2.48	0.02	0.07	0.02	0.07	0.10%	0.01	0.00	0.00	0.00	0.20%	0.02	0.00
2.48	0.02	0.07	0.02	0.07	0.10%	0.01	0.00	0.00	0.00	0.20%	0.02	0.00
7.74	0.05	0.21	0.05	0.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
10.06	0.12	0.50	0.12	0.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
10.06	0.12	0.50	0.12	0.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.50	0.06	0.28	0.06	0.28	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.86	0.07	0.29	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.77	0.07	0.29	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
7.34	0.08	0.37	0.08	0.37	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.51	0.07	0.33	0.07	0.33	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.72	0.07	0.29	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.42	0.06	0.27	0.06	0.27	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.28	0.07	0.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.24	0.05	0.21	0.05	0.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
3.73	0.04	0.19	0.04	0.19	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.49	0.05	0.22	0.05	0.22	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
7.44	0.09	0.37	0.09	0.37	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9.25	0.11	0.46	0.11	0.46	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.24	0.07	0.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.27	0.07	0.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.67	0.06	0.28	0.06	0.28	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9.39	0.11	0.47	0.11	0.47	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
12.45	0.14	0.62	0.14	0.62	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.76	0.07	0.29	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.64	0.06	0.28	0.06	0.28	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
8.65	0.10	0.43	0.10	0.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
8.84	0.10	0.44	0.10	0.44	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.94	0.07	0.30	0.07	0.30	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.16	0.07	0.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9.13	0.10	0.46	0.10	0.46	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.66	0.06	0.28	0.06	0.28	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5.81	0.07	0.29	0.07	0.29	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
2.48	0.01	0.05	0.01	0.05	0.10%	0.01	0.00	0.00	0.00	0.20%	0.02	0.00
2.48	0.01	0.05	0.01	0.05	0.10%	0.01	0.00	0.00	0.00	0.20%	0.02	0.00
7.74	0.03	0.15	0.03	0.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.30	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
2.58	0.01	0.03	0.01	0.03	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.69	0.00	0.01	0.00	0.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.14	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
	0.20	0.86	0.20	COMG 003		0.00	0.00	0.00	COMG 003		0.01	0.00

HAP-Organic

HAP-Organic

HAP-Organic

volatile		Cumene CAS# 98-82-8					volatile					volatile			
-56-1							Ethylbenzene CAS# 100-41-4					Methyl Isobu			
Uncontrolled	Limited	(%Wt)	Uncontrolled		Uncontrolled		(%Wt)	Uncontrolled		Uncontrolled		(%Wt)			
(ton/yr)	(ton/yr)		(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		(lb/gal)		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.70%	0.09		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.70%	0.10		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	0.00	0.01	0.01	2.70%	0.34		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	0.00	0.01	0.01	2.70%	0.34		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.30%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.30%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.50%	0.04	0.00	0.01	0.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.30%	0.03	0.00	0.01	0.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.10%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.40%	0.04	0.00	0.01	0.01	0.00%	0.00		
0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.10%	0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.20%	0.02	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.40%	0.04	0.00	0.01	0.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.40%	0.04	0.00	0.01	0.01	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.70%	0.05	0.00	0.00	0.00	3.90%	0.28	0.00	0.01	0.01	35.00%	2.54		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00		
0.00	COMG 003		0.03	0.00	0.01	COMG 003		0.08	0.01	0.03	COMG 003		0.59		

HAP-Organic

volatile

Max Organic HAP Emission
All worst case Glycol Ether
2.70 2.337309

HAP-Organic

volatile

Xylene CAS# 1330-20-7				Glycol Ethers CAS# NA				
	Uncontrolled	Uncontrolled	Limited		Uncontrolled	Uncontrolled	Limited	
(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.04	0.00	0.01	0.01	4.50%	0.58	0.03	0.13	0.13
0.06	0.00	0.01	0.01	3.60%	0.52	0.03	0.11	0.11
0.18	0.00	0.02	0.02	38.90%	2.99	0.07	0.32	0.32
0.18	0.00	0.02	0.02	38.90%	2.99	0.07	0.32	0.32
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.01	0.03	0.03	6.70%	0.85	0.04	0.17	0.17
0.13	0.01	0.03	0.03	6.70%	0.85	0.04	0.17	0.17
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.40%	0.04	0.00	0.01	0.01
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.03	0.00	0.01	0.01	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	21.00%	1.52	0.07	0.30	0.30
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.18	0.01	0.04	0.04	0.20%	0.02	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.01	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.18	0.00	0.01	0.01	38.90%	2.99	0.05	0.24	0.24
0.18	0.00	0.01	0.01	38.90%	2.99	0.05	0.24	0.24
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.20	0.01	0.06	0.06	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.34	0.03	0.11	COMG 003		1.64	0.12	0.54	COMG 003

is by Mix that is the Max for a Single HAP

xylene hexamethyltoluene Methyl Isobut Ethylbenzene Cumene Methanol Formaldehyde
 1.543808 0.510121 1.549345 2.215551 1.549345 2.338722 1.569949 1.569949

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 71 - Burn Off Oven STRU 86 - Burn Off Oven Vent

Computed	GJR
Checked	MLM
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input (MMBtu/hr)	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.80	1,764.7	15.5

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.176	0.77	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.148	0.65	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.013	0.06	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.013	0.06	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.013	0.06	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.010	0.04	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	212	928	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.004	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.004	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	213	933	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	8.82E-07	3.86E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.56E-07	6.82E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.71E-06	1.62E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	2.12E-06	9.28E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.32E-04	5.80E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	3.18E-03	1.39E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.08E-06	4.71E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	6.00E-06	2.63E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	3.53E-07	1.55E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	2.12E-08	9.28E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	1.94E-06	8.50E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.47E-06	1.08E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.48E-07	6.49E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	6.71E-07	2.94E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	4.59E-07	2.01E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	3.71E-06	1.62E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	4.24E-08	1.86E-07	COMG 003
Total HAPs =			1.46E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphthi	1.80E-06
1.80E+00	Acenaphthi	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)ant	1.80E-06
2.00E-04	Benzo(a)py	1.20E-06
1.20E-05	Benzo(b)flu	1.80E-06
1.10E-03	Benzo(g,h,i	1.20E-06
1.40E-03	Benzo(k)flu	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-cd)py	1.80E-06
	Phenanthrene	1.70E-05
	Pyrene	5.00E-06

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MLM

Task EQUI 72 - Emergency Generator MFG Offices

Sheets 1

Natural Gas-Fired Standby Generator				
Hours	Horsepower (HP)	Fuel Input (scfh)	Heat Content (Btu/scf)	Heat Input (MMBtu/hr)
500	154	1280	1,020	1.31

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Pollutant Emissions		
			lb/hr	TPY	limited tpy
Nitrogen Oxides (NO _x) ^a	10102-43-9	5.18E-01	6.79E-01	1.70E-01	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	1.04E+00	1.36E+00	3.40E-01	COMG 003
Particulate Matter (PM) ^b	-	1.94E-02	2.54E-02	6.36E-03	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	1.94E-02	2.54E-02	6.36E-03	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	1.94E-02	2.54E-02	6.36E-03	COMG 003
Volatile Organic Compounds (VOC) ^a	-	2.59E-01	3.40E-01	8.49E-02	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	7.70E-04	1.93E-04	COMG 003
Carbon Dioxide (CO ₂) ^b	-	1.10E+02	1.44E+02	3.60E+01	COMG 003
Methane (CH ₄) ^c	-	2.21E-03	2.89E-03	7.22E-04	COMG 003
Nitrous Oxide (N ₂ O) ^c	-	2.21E-04	2.89E-04	7.22E-05	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^d	-	NA	1.44E+02	3.61E+01	COMG 003

Notes:
^a Emission factors from 40 CFR 60, Subpart JJJJ, Table 1, Engines >130 HP: NO_x - 2.0 g/HP-hr, CO - 4.0 g/HP-hr, VOC - 1.0

^b Emission factors from AP-42 (10/24) Table 3.2-3

^c Emission factors from 40 CFR 98, Subpart C, Table C-2, CH₄ - 1.0E-03 kg/MMBtu, N₂O - 1.0E-04 kg/MMBtu

^d Global Warming Potential from 40 CFR 98, Subpart A, Table A-1, CH₄ - 28, N₂O - 298

Hazardous Air Pollutants ^a	Emission Factor (lb/MMBtu)	Pollutant Emissions		
		lb/hr	TPY	limited tpy
1,1,2,2-Tetrachloroethane	2.53E-05	3.31E-05	8.29E-06	COMG 003
1,1,2-Trichloroethane	1.53E-05	2.00E-05	5.01E-06	COMG 003
1,3-Butadiene	6.63E-04	8.69E-04	2.17E-04	COMG 003
1,3-Dichloropropene	1.27E-05	1.66E-05	4.16E-06	COMG 003
Acetaldehyde	2.79E-03	3.65E-03	9.14E-04	COMG 003
Acrolein	2.63E-03	3.45E-03	8.61E-04	COMG 003
Benzene	1.58E-03	2.07E-03	5.17E-04	COMG 003
Carbon Tetrachloride	1.77E-05	2.32E-05	5.80E-06	COMG 003
Chlorobenzene	1.29E-05	1.69E-05	4.22E-06	COMG 003
Chloroform	1.37E-05	1.79E-05	4.49E-06	COMG 003
Ethylbenzene	2.48E-05	3.25E-05	8.12E-06	COMG 003
Ethylene Dibromide	2.13E-05	2.79E-05	6.98E-06	COMG 003
Formaldehyde	2.05E-02	2.69E-02	6.71E-03	COMG 003
Methylene Chloride	4.12E-05	5.40E-05	1.35E-05	COMG 003
Naphthalene	9.71E-05	1.27E-04	3.18E-05	COMG 003
POM	1.41E-04	1.85E-04	4.62E-05	COMG 003
Styrene	1.19E-05	1.56E-05	3.90E-06	COMG 003
Toluene	5.58E-04	7.31E-04	1.83E-04	COMG 003
Vinyl Chloride	7.18E-06	9.41E-06	2.35E-06	COMG 003
Xylene	1.95E-04	2.55E-04	6.39E-05	COMG 003

Notes:
^b Emission factors from AP-42 (10/24) Table 3.2-3

McNeilus Truck & Manufacturing, Inc.

EQUI 73 - Monorail Prime Booth

TREA 35: Panel Filter (Monorail Prime Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85%

85.0%

85.0%

STRU 89: Monorail Prime

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Akzo Nobel Product Name	Product Description	Coating Type	Coating Mix (%)	Spray Gun (#)	Gun Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	24
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	24
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	24
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	24
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	24
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	24
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	24
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	24
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	24
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	24
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	24
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	24
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	24
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	24
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	24
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	24
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	24
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	24
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	24
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	24
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	24
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	24
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	24
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	24
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	24
480972	Autocoat BT Toner B610	Topcoat	61%	2	24
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	24
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	24
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	24
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	24
509953	Autocoat BT Toner B627	Topcoat	61%	2	24
509957	Autocoat BT Toner B632	Topcoat	61%	2	24
509958	Autocoat BT Toner B649	Topcoat	61%	2	24
509959	Autocoat BT Toner B653	Topcoat	61%	2	24
509981	Autocoat BT Toner B664	Topcoat	61%	2	24
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	24
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	24
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	24
391191	Exempt Reducer	Reducer	15%	2	24
480460	AT105 Bus Reducer SRA	Reducer	15%	2	24
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	24
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	24
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	24
Max Em. Rate					

Note 1: Limited HAP emissions cacluated based on effective limit of VOC demonstrated in Title V total facility PTE calculations. Effect of 23

Note 2: PM_{2.5} cannot physically exceed PM₁₀, therefore, PM_{2.5} set equiivalent to PM₁₀ as a worst-case assumption.

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

17 tpy limit results in emissions of 10% of total unrestricted emissions.

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic volatile			Fomaldehyde CAS# 50-00-0					HAP-Organic volatile	
PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Uncontrolled Uncontrolled Limited					Meth:	
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.06	0.25	COMG 003	0.01		

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8						Ethylbenzene CAS# 100-97-6	
Uncontrolled	Uncontrolled	Limited	Uncontrolled			Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01	
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00	
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04	
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00	
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.11	0.50	COMG 003	0.03	0.67	2.92	COMG 003	0.08			

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HAP-Organic volatile			HAP-Organic volatile						HAP-Organic volatile	
Styrene CAS# 108-88-3			Hexamethylene-1,6-Diisocyanate CAS# 822-06-0						Xylenes CAS# 100-97-0	
Uncontrolled	Uncontrolled	Limited	Uncontrolled			Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.30%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.06	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.20%	0.02	0.14	0.59	0.59	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.14	0.61	0.61	0.00%	0.00	0.00	0.00	0.00	1.80%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.20%	0.02	0.10	0.43	0.43	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.02	0.11	0.11	0.00%	0.00	0.00	0.00	0.00	16.60%	1.20	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.16	0.72	COMG 003	0.01	0.14	0.59	COMG 003		0.34		

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited	Uncontrolled Uncontrolled Limited				
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003



Computation

Job No. NA

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI74 - Monorail Topcoat Booth Air Make-Up
STRU 87: Monorail Topcoat
STRU 88: Monorail Topcoat

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	2.59	2,541.2	22.3

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.254	1.11	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.213	0.93	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.019	0.08	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.019	0.08	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.019	0.08	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.014	0.06	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	305	1336	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.006	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.006	0.03	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	307	1344	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	1.27E-06	5.57E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	2.24E-07	9.82E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	5.34E-06	2.34E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	3.05E-06	1.34E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.91E-04	8.35E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	4.57E-03	2.00E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.55E-06	6.79E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	8.64E-06	3.78E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	5.08E-07	2.23E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	3.05E-08	1.34E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.80E-06	1.22E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	3.56E-06	1.56E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	2.13E-07	9.35E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	9.66E-07	4.23E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	6.61E-07	2.89E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	5.34E-06	2.34E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	6.10E-08	2.67E-07	COMG 003
Total HAPs =				2.10E-02	

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

McNeilus Truck & Manufacturing, Inc.

EQUI 75 - Monorail Topcoat Booth

TREA 36: Panel Filter (Monorail Paint Booth)

Filter Control Eff.: PM, PM10, and PM2.5 = 85%

85.0%

85.0%

STRU 87: Monorail Topcoat

STRU 88: Monorail Topcoat

Akzo Nobel Product Name	Product Description	Coating Type	Coating Mix (%)	Spray Gun (#)	Gun Capacity (oz/min)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	24
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	24
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	24
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	24
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	24
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	24
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	24
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	24
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	24
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	24
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	24
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	24
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	24
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	24
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	24
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	24
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	24
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	24
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	24
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	24
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	24
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	24
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	24
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	24
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	24
480972	Autocoat BT Toner B610	Topcoat	61%	2	24
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	24
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	24
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	24
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	24
509953	Autocoat BT Toner B627	Topcoat	61%	2	24
509957	Autocoat BT Toner B632	Topcoat	61%	2	24
509958	Autocoat BT Toner B649	Topcoat	61%	2	24
509959	Autocoat BT Toner B653	Topcoat	61%	2	24
509981	Autocoat BT Toner B664	Topcoat	61%	2	24
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	24
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	24
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	24
391191	Exempt Reducer	Reducer	15%	2	24
480460	AT105 Bus Reducer SRA	Reducer	15%	2	24
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	24
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	24
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	24
Max Em. Rate					

Note 1: Limited HAP emissions cacluated based on effective limit of VOC demonstrated in Title V total facility PTE calculations. Effect of 23

Note 2: PM_{2.5} cannot physically exceed PM₁₀, therefore, PM_{2.5} set equiivalent to PM₁₀ as a worst-case assumption.

Maximum Spray Rate (gal/hr)	Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)
22.50	12.93	75%	20.50%	2.65	39.96	175.02	COMG 003
22.50	14.33	75%	17.93%	2.57	38.74	169.69	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	7.69	75%	67.90%	5.22	38.77	169.81	COMG 003
22.50	9.10	75%	15.20%	1.38	10.27	44.98	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	12.74	75%	21.11%	2.69	36.92	161.71	COMG 003
22.50	8.60	75%	36.40%	3.13	42.96	188.19	COMG 003
22.50	8.81	75%	33.60%	2.96	40.63	177.95	COMG 003
22.50	8.98	75%	35.80%	3.21	44.12	193.26	COMG 003
22.50	10.48	75%	30.50%	3.20	43.87	192.15	COMG 003
22.50	9.66	75%	32.71%	3.16	43.37	189.96	COMG 003
22.50	8.80	75%	35.23%	3.10	42.55	186.36	COMG 003
22.50	8.57	75%	36.70%	3.15	43.17	189.07	COMG 003
22.50	9.37	75%	33.50%	3.14	43.08	188.70	COMG 003
22.50	8.15	75%	47.98%	3.91	53.66	235.05	COMG 003
22.50	8.11	75%	54.50%	4.42	60.66	265.71	COMG 003
22.50	8.16	75%	44.49%	3.63	49.82	218.22	COMG 003
22.50	10.78	75%	30.80%	3.32	45.57	199.58	COMG 003
22.50	12.48	75%	26.10%	3.26	44.71	195.81	COMG 003
22.50	7.22	75%	100.20%	7.23	99.29	434.90	COMG 003
22.50	9.51	75%	34.38%	3.27	44.88	196.58	COMG 003
22.50	9.50	75%	34.32%	3.26	44.74	195.98	COMG 003
22.50	9.00	75%	37.00%	3.33	45.70	200.18	COMG 003
22.50	12.45	75%	24.58%	3.06	42.00	183.95	COMG 003
22.50	15.00	75%	17.40%	2.61	35.82	156.90	COMG 003
22.50	9.00	75%	35.70%	3.21	44.10	193.15	COMG 003
22.50	10.21	75%	44.86%	4.58	62.86	275.33	COMG 003
22.50	11.85	75%	27.51%	3.26	44.74	195.98	COMG 003
22.50	12.11	75%	27.00%	3.27	44.88	196.56	COMG 003
22.50	8.95	75%	33.63%	3.01	41.31	180.95	COMG 003
22.50	9.31	75%	33.70%	3.14	43.06	188.61	COMG 003
22.50	12.14	75%	24.88%	3.02	41.45	181.55	COMG 003
22.50	8.82	75%	35.90%	3.17	43.46	190.35	COMG 003
22.50	8.81	75%	34.40%	3.03	41.60	182.19	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	7.69	75%	67.90%	5.22	28.20	123.50	COMG 003
22.50	9.10	75%	15.20%	1.38	7.47	32.72	COMG 003
22.50	7.19	75%	100.00%	7.19	24.27	106.29	COMG 003
22.50	7.25	75%	95.86%	6.95	23.46	102.74	COMG 003
22.50	6.89	75%	100.00%	6.89	23.25	101.85	COMG 003
22.50	6.86	75%	90.00%	6.17	20.84	91.27	COMG 003
22.50	7.07	75%	98.50%	6.96	23.50	102.94	COMG 003
					151.76	664.69	237.00

i7 tpy limit results in emissions of 10% of total unrestricted emissions.

Solids Content (%Wt)	Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
79.71%	10.31	38.84	170.13	5.83	25.52	79.71%	10.31	38.84
82.10%	11.76	44.34	194.21	6.65	29.13	82.10%	11.76	44.34
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
32.30%	2.48	4.61	20.19	0.69	3.03	32.30%	2.48	4.61
85.00%	7.74	14.36	62.89	2.15	9.43	85.00%	7.74	14.36
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
79.00%	10.06	34.53	151.26	5.18	22.69	79.00%	10.06	34.53
64.00%	5.50	18.89	82.72	2.83	12.41	64.00%	5.50	18.89
66.50%	5.86	20.10	88.05	3.02	13.21	66.50%	5.86	20.10
64.30%	5.77	19.81	86.78	2.97	13.02	64.30%	5.77	19.81
70.00%	7.34	25.17	110.25	3.78	16.54	70.00%	7.34	25.17
67.40%	6.51	22.34	97.85	3.35	14.68	67.40%	6.51	22.34
65.00%	5.72	19.63	85.97	2.94	12.89	65.00%	5.72	19.63
63.30%	5.42	18.61	81.53	2.79	12.23	63.30%	5.42	18.61
67.00%	6.28	21.54	94.35	3.23	14.15	67.00%	6.28	21.54
52.00%	4.24	14.54	63.69	2.18	9.55	52.00%	4.24	14.54
46.00%	3.73	12.80	56.07	1.92	8.41	46.00%	3.73	12.80
55.00%	4.49	15.40	67.45	2.31	10.12	55.00%	4.49	15.40
69.00%	7.44	25.52	111.79	3.83	16.77	69.00%	7.44	25.52
74.10%	9.25	31.73	138.98	4.76	20.85	74.10%	9.25	31.73
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
65.62%	6.24	21.41	93.79	3.21	14.07	65.62%	6.24	21.41
66.00%	6.27	21.51	94.23	3.23	14.13	66.00%	6.27	21.51
63.00%	5.67	19.46	85.21	2.92	12.78	63.00%	5.67	19.46
75.42%	9.39	32.22	141.12	4.83	21.17	75.42%	9.39	32.22
83.00%	12.45	42.72	187.11	6.41	28.07	83.00%	12.45	42.72
64.00%	5.76	19.76	86.57	2.96	12.98	64.00%	5.76	19.76
55.20%	5.64	19.34	84.70	2.90	12.71	55.20%	5.64	19.34
73.00%	8.65	29.68	130.01	4.45	19.50	73.00%	8.65	29.68
73.00%	8.84	30.33	132.86	4.55	19.93	73.00%	8.84	30.33
66.40%	5.94	20.39	89.31	3.06	13.40	66.40%	5.94	20.39
66.20%	6.16	21.15	92.63	3.17	13.89	66.20%	6.16	21.15
75.20%	9.13	31.32	137.20	4.70	20.58	75.20%	9.13	31.32
64.20%	5.66	19.43	85.10	2.91	12.77	64.20%	5.66	19.43
66.00%	5.81	19.95	87.39	2.99	13.11	66.00%	5.81	19.95
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
32.30%	2.48	3.35	14.69	0.50	2.20	32.30%	2.48	3.35
85.00%	7.74	10.44	45.74	1.57	6.86	85.00%	7.74	10.44
0.00%	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4.20%	0.30	0.26	1.13	0.04	0.17	4.20%	0.30	0.26
37.50%	2.58	2.18	9.55	0.33	1.43	37.50%	2.58	2.18
10.00%	0.69	0.58	2.54	0.09	0.38	10.00%	0.69	0.58
2.00%	0.14	0.12	0.52	0.02	0.08	2.00%	0.14	0.12
		58.70	257.09	8.80	COMG 003			58.70

HAP-Organic
volatile

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0					Meth:	
			Uncontrolled			Uncontrolled	Limited		
			(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)
170.13	5.83	25.52	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
194.21	6.65	29.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
20.19	0.69	3.03	0.10%	0.01	0.06	0.25	0.25	0.20%	0.02
62.89	2.15	9.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
151.26	5.18	22.69	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
82.72	2.83	12.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
88.05	3.02	13.21	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.78	2.97	13.02	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
110.25	3.78	16.54	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
97.85	3.35	14.68	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.97	2.94	12.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
81.53	2.79	12.23	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.35	3.23	14.15	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
63.69	2.18	9.55	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
56.07	1.92	8.41	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
67.45	2.31	10.12	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
111.79	3.83	16.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
138.98	4.76	20.85	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
93.79	3.21	14.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
94.23	3.23	14.13	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.21	2.92	12.78	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
141.12	4.83	21.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
187.11	6.41	28.07	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
86.57	2.96	12.98	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
84.70	2.90	12.71	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
130.01	4.45	19.50	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
132.86	4.55	19.93	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
89.31	3.06	13.40	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
92.63	3.17	13.89	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
137.20	4.70	20.58	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
85.10	2.91	12.77	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
87.39	2.99	13.11	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
14.69	0.50	2.20	0.10%	0.01	0.04	0.18	0.18	0.20%	0.02
45.74	1.57	6.86	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
1.13	0.04	0.17	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
9.55	0.33	1.43	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
2.54	0.09	0.38	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.52	0.02	0.08	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
257.09	8.80	COMG 003	0.00	0.06	0.25	COMG 003		0.01	

HAP-Organic
volatile

HAP-Organic
volatile

anol CAS# 67-56-1			Cumene CAS# 98-82-8						Ethylbenzene CAS# 100-97-6	
Uncontrolled	Uncontrolled	Limited	Uncontrolled			Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.11	0.50	0.50	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.20%	0.03	
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.29	1.26	1.26	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.13	0.58	0.58	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.24	1.06	1.06	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.24	1.03	1.03	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.26	1.13	1.13	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.34	1.47	1.47	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.02	0.33	1.46	1.46	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.22	0.98	0.98	0.10%	0.01	
0.00	0.00	0.00	0.10%	0.01	0.15	0.65	0.65	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.17	0.75	0.75	0.00%	0.00	
0.00	0.00	0.00	0.50%	0.04	0.50	2.17	2.17	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.26	1.14	1.14	0.00%	0.00	
0.00	0.00	0.00	0.30%	0.03	0.37	1.62	1.62	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.02	0.21	0.90	0.90	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.14	0.61	0.61	0.40%	0.04	
0.00	0.00	0.00	0.10%	0.01	0.16	0.71	0.71	0.00%	0.00	
0.00	0.00	0.00	0.10%	0.01	0.17	0.73	0.73	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.25	1.08	1.08	0.00%	0.00	
0.00	0.00	0.00	0.20%	0.02	0.26	1.12	1.12	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00	
0.00	0.00	0.00	0.40%	0.04	0.48	2.12	2.12	0.00%	0.00	
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.08	0.36	0.36	0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.70%	0.05	0.17	0.75	0.75	3.90%	0.28	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.11	0.50	COMG 003	0.03	0.67	2.92	COMG 003	0.08			

HAP-Organic volatile			HAP-Organic volatile						HAP-Organic volatile	
Styrene CAS# 108-88-3			Hexamethylene-1,6-Diisocyanate CAS# 822-06-0						Xylenes CAS# 100-97-0	
Uncontrolled	Uncontrolled	Limited	Uncontrolled			Uncontrolled	Limited			
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/gal)
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.30%	0.04	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.06	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.20%	0.02	0.14	0.59	0.59	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.03	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.14	0.61	0.61	0.00%	0.00	0.00	0.00	0.00	1.80%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18	
0.00	0.00	0.00	0.20%	0.02	0.10	0.43	0.43	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.02	0.11	0.11	0.00%	0.00	0.00	0.00	0.00	16.60%	1.20	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	
0.16	0.72	COMG 003		0.01	0.14	0.59	COMG 003		0.34	

HAP-Organic
volatile

ie CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited	Uncontrolled Uncontrolled Limited				
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.58	2.56	2.56	4.50%	0.58	8.77	38.42	38.42
0.86	3.78	3.78	3.60%	0.52	7.78	34.06	34.06
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
1.31	5.75	5.75	38.90%	2.99	22.21	97.29	97.29
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
1.75	7.66	7.66	6.70%	0.85	11.72	51.31	51.31
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.49	2.16	2.16
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.56	0.56	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.11	0.49	0.49	0.00%	0.00	0.00	0.00	0.00
0.45	1.96	1.96	0.00%	0.00	0.00	0.00	0.00
0.15	0.65	0.65	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.10	0.43	0.43	21.00%	1.52	20.81	91.15	91.15
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.12	0.54	0.54	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.52	11.05	11.05	0.20%	0.02	0.28	1.23	1.23
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.17	0.73	0.73	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.96	4.18	4.18	38.90%	2.99	16.15	70.75	70.75
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.06	17.79	17.79	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
7.54	33.02	COMG 003		1.64	36.96	161.90	COMG 003

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI 76 - Monorail Prime Booth Air Make-Up
STRU 89: Monorail Prime
STRU 90: Monorail Prime

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	2.59	2,541.2	22.3

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.254	1.11	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.213	0.93	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.019	0.08	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.019	0.08	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.019	0.08	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.014	0.06	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	305	1336	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.006	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.006	0.03	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	307	1344	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	1.27E-06	5.57E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	2.24E-07	9.82E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	5.34E-06	2.34E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	3.05E-06	1.34E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.91E-04	8.35E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	4.57E-03	2.00E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.55E-06	6.79E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	8.64E-06	3.78E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	5.08E-07	2.23E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	3.05E-08	1.34E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.80E-06	1.22E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	3.56E-06	1.56E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	2.13E-07	9.35E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	9.66E-07	4.23E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	6.61E-07	2.89E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	5.34E-06	2.34E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	6.10E-08	2.67E-07	COMG 003
Total HAPs =				2.10E-02	

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 77 - Monorail Curing Oven STRU 91: Monorail Curing Oven STRU 92: Monorail Curing Oven

Computed	GJR
Checked	MM
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	3.00	2,941.2	25.8

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.294	1.29	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.247	1.08	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.022	0.10	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.022	0.10	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.022	0.10	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.016	0.07	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	353	1546	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.006	0.03	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.007	0.03	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	355	1555	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	1.47E-06	6.44E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	2.59E-07	1.14E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	6.18E-06	2.71E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	3.53E-06	1.55E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	2.21E-04	9.66E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	5.29E-03	2.32E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.79E-06	7.86E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.00E-05	4.38E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	5.88E-07	2.58E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	3.53E-08	1.55E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	3.24E-06	1.42E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	4.12E-06	1.80E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	2.47E-07	1.08E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.12E-06	4.90E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	7.65E-07	3.35E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	6.18E-06	2.71E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	7.06E-08	3.09E-07	COMG 003
Total HAPs =				2.43E-02	

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

McNeilus Truck & Manufacturing, Inc.

EQUI 80 - Side Loader Paint Booth

TREA 39: Side Loader Paint Booth Panel Filter

TREA 42: Side Loader Paint Booth Panel Filter

TREA 43: Side Loader Paint Booth Panel Filter

Filter Control Eff.: PM, PM10, and PM2.5 = 85%

99.7% 99.7%

STRU 95: MFG Robot Booth Paint

STRU 96: MFG Manual Booth Paint

Akzo Nobel Product	Coating	Coating	Spray	Gun	Maximum
Product Name Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)	Spray Rate (gal/hr)
483378 Autocoat LV360Primer EP Grey	Primer	67%	2	26	24.38
531421 Autocoat LV CIP Epoxy Primer White	Primer	67%	2	26	24.38
384291 Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	26	24.38
384295 Autocryl LV EP Cip Hardener	Hardener	33%	2	26	24.38
480663 Autocoat BT LV650 Hardener	Hardener	33%	2	26	24.38
381073 Autocryl LV EP Chassis Black	Topcoat	61%	2	26	24.38
381074 Autocryl LV EP Chassis Black	Topcoat	61%	2	26	24.38
391667 Autocoat BT B616 Mixing Black	Topcoat	61%	2	26	24.38
391670 Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	26	24.38
391673 Autocoat BT B625 Brilliant Red	Topcoat	61%	2	26	24.38
391677 Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	26	24.38
391679 Autocoat BT B641 Orange Yellow	Topcoat	61%	2	26	24.38
391686 Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	26	24.38
391687 Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	26	24.38
396206 Autocoat BT B648 Light Yellow	Topcoat	61%	2	26	24.38
396716 Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	26	24.38
396717 Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	26	24.38
397352 Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	26	24.38
480588 Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	26	24.38
480590 Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	26	24.38
480593 Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	26	24.38
480595 Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	26	24.38
480596 Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	26	24.38
480600 Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	26	24.38
480604 Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	26	24.38
480972 Autocoat BT Toner B610	Topcoat	61%	2	26	24.38
482377 Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	26	24.38
483296 Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	26	24.38
509756 Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	26	24.38
509938 Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	26	24.38
509953 Autocoat BT Toner B627	Topcoat	61%	2	26	24.38
509957 Autocoat BT Toner B632	Topcoat	61%	2	26	24.38
509958 Autocoat BT Toner B649	Topcoat	61%	2	26	24.38
509959 Autocoat BT Toner B653	Topcoat	61%	2	26	24.38
509981 Autocoat BT Toner B664	Topcoat	61%	2	26	24.38
384291 Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	26	24.38
384295 Autocryl LV EP Cip Hardener	Hardener	24%	2	26	24.38
480663 Autocoat BT LV650 Hardener	Hardener	24%	2	26	24.38
391191 Exempt Reducer	Reducer	15%	2	26	24.38
480460 AT105 Bus Reducer SRA	Reducer	15%	2	26	24.38
480494 Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	26	24.38
480495 Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	26	24.38
483297 Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	26	24.38

Max Em. Rate

Note 1: Limited HAP emissions calculated based on effective limit of VOC demonstrated in Title V total facility PTE calculations.

Note 2: PM_{2.5} cannot physically exceed PM₁₀, therefore, PM_{2.5} set equivalent to PM₁₀ as a worst-case assumption.

Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)	Solids Content (%Wt)
12.93	75%	20.50%	2.65	43.29	189.60	COMG 003	79.71%
14.33	75%	17.93%	2.57	41.97	183.83	COMG 003	82.10%
7.69	75%	67.90%	5.22	42.00	183.96	COMG 003	32.30%
7.69	75%	67.90%	5.22	42.00	183.96	COMG 003	32.30%
9.10	75%	15.20%	1.38	11.13	48.73	COMG 003	85.00%
12.74	75%	21.11%	2.69	40.00	175.19	COMG 003	79.00%
12.74	75%	21.11%	2.69	40.00	175.19	COMG 003	79.00%
8.60	75%	36.40%	3.13	46.55	203.87	COMG 003	64.00%
8.81	75%	33.60%	2.96	44.01	192.78	COMG 003	66.50%
8.98	75%	35.80%	3.21	47.80	209.37	COMG 003	64.30%
10.48	75%	30.50%	3.20	47.53	208.17	COMG 003	70.00%
9.66	75%	32.71%	3.16	46.99	205.80	COMG 003	67.40%
8.80	75%	35.23%	3.10	46.09	201.89	COMG 003	65.00%
8.57	75%	36.70%	3.15	46.77	204.83	COMG 003	63.30%
9.37	75%	33.50%	3.14	46.67	204.42	COMG 003	67.00%
8.15	75%	47.98%	3.91	58.14	254.64	COMG 003	52.00%
8.11	75%	54.50%	4.42	65.72	287.85	COMG 003	46.00%
8.16	75%	44.49%	3.63	53.97	236.40	COMG 003	55.00%
10.78	75%	30.80%	3.32	49.36	216.22	COMG 003	69.00%
12.48	75%	26.10%	3.26	48.43	212.13	COMG 003	74.10%
7.22	75%	100.20%	7.23	107.57	471.14	COMG 003	0.00%
9.51	75%	34.38%	3.27	48.62	212.96	COMG 003	65.62%
9.50	75%	34.32%	3.26	48.47	212.31	COMG 003	66.00%
9.00	75%	37.00%	3.33	49.51	216.87	COMG 003	63.00%
12.45	75%	24.58%	3.06	45.50	199.28	COMG 003	75.42%
15.00	75%	17.40%	2.61	38.81	169.98	COMG 003	83.00%
9.00	75%	35.70%	3.21	47.77	209.25	COMG 003	64.00%
10.21	75%	44.86%	4.58	68.10	298.27	COMG 003	55.20%
11.85	75%	27.51%	3.26	48.47	212.31	COMG 003	73.00%
12.11	75%	27.00%	3.27	48.62	212.94	COMG 003	73.00%
8.95	75%	33.63%	3.01	44.75	196.03	COMG 003	66.40%
9.31	75%	33.70%	3.14	46.65	204.33	COMG 003	66.20%
12.14	75%	24.88%	3.02	44.90	196.68	COMG 003	75.20%
8.82	75%	35.90%	3.17	47.08	206.21	COMG 003	64.20%
8.81	75%	34.40%	3.03	45.06	197.37	COMG 003	66.00%
7.69	75%	67.90%	5.22	30.55	133.79	COMG 003	32.30%
7.69	75%	67.90%	5.22	30.55	133.79	COMG 003	32.30%
9.10	75%	15.20%	1.38	8.09	35.44	COMG 003	85.00%
7.19	75%	100.00%	7.19	26.29	115.14	COMG 003	0.00%
7.25	75%	95.86%	6.95	25.41	111.30	COMG 003	4.20%
6.89	75%	100.00%	6.89	25.19	110.34	COMG 003	37.50%
6.86	75%	90.00%	6.17	22.57	98.87	COMG 003	10.00%
7.07	75%	98.50%	6.96	25.46	111.52	COMG 003	2.00%
				164.40	720.08	237.00	

Effect of 237 tpy limit results in emissions of 10% of total unrestricted emissions.

Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
10.31	42.08	184.31	0.14	0.62	79.71%	10.31	42.08
11.76	48.03	210.39	0.16	0.71	82.10%	11.76	48.03
2.48	4.99	21.88	0.02	0.07	32.30%	2.48	4.99
2.48	4.99	21.88	0.02	0.07	32.30%	2.48	4.99
7.74	15.55	68.13	0.05	0.23	85.00%	7.74	15.55
10.06	37.41	163.86	0.13	0.55	79.00%	10.06	37.41
10.06	37.41	163.86	0.13	0.55	79.00%	10.06	37.41
5.50	20.46	89.61	0.07	0.30	64.00%	5.50	20.46
5.86	21.78	95.39	0.07	0.32	66.50%	5.86	21.78
5.77	21.46	94.01	0.07	0.32	64.30%	5.77	21.46
7.34	27.27	119.44	0.09	0.40	70.00%	7.34	27.27
6.51	24.20	106.00	0.08	0.36	67.40%	6.51	24.20
5.72	21.26	93.13	0.07	0.31	65.00%	5.72	21.26
5.42	20.17	88.32	0.07	0.30	63.30%	5.42	20.17
6.28	23.34	102.21	0.08	0.34	67.00%	6.28	23.34
4.24	15.75	69.00	0.05	0.23	52.00%	4.24	15.75
3.73	13.87	60.74	0.05	0.20	46.00%	3.73	13.87
4.49	16.68	73.07	0.06	0.25	55.00%	4.49	16.68
7.44	27.65	121.10	0.09	0.41	69.00%	7.44	27.65
9.25	34.38	150.56	0.12	0.51	74.10%	9.25	34.38
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.24	23.20	101.60	0.08	0.34	65.62%	6.24	23.20
6.27	23.31	102.08	0.08	0.34	66.00%	6.27	23.31
5.67	21.08	92.31	0.07	0.31	63.00%	5.67	21.08
9.39	34.90	152.88	0.12	0.52	75.42%	9.39	34.90
12.45	46.28	202.70	0.16	0.68	83.00%	12.45	46.28
5.76	21.41	93.78	0.07	0.32	64.00%	5.76	21.41
5.64	20.95	91.76	0.07	0.31	55.20%	5.64	20.95
8.65	32.16	140.84	0.11	0.48	73.00%	8.65	32.16
8.84	32.86	143.93	0.11	0.49	73.00%	8.84	32.86
5.94	22.09	96.76	0.07	0.33	66.40%	5.94	22.09
6.16	22.91	100.35	0.08	0.34	66.20%	6.16	22.91
9.13	33.94	148.64	0.11	0.50	75.20%	9.13	33.94
5.66	21.05	92.19	0.07	0.31	64.20%	5.66	21.05
5.81	21.61	94.67	0.07	0.32	66.00%	5.81	21.61
2.48	3.63	15.91	0.01	0.05	32.30%	2.48	3.63
2.48	3.63	15.91	0.01	0.05	32.30%	2.48	3.63
7.74	11.31	49.55	0.04	0.17	85.00%	7.74	11.31
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.30	0.28	1.22	0.00	0.00	4.20%	0.30	0.28
2.58	2.36	10.34	0.01	0.03	37.50%	2.58	2.36
0.69	0.63	2.75	0.00	0.01	10.00%	0.69	0.63
0.14	0.13	0.57	0.00	0.00	2.00%	0.14	0.13
63.59	278.52	0.21	COMG 003			63.59	

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0				
			(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)
184.31	0.14	0.62	0.00%	0.00	0.00	0.00	0.00
210.39	0.16	0.71	0.00%	0.00	0.00	0.00	0.00
21.88	0.02	0.07	0.10%	0.01	0.06	0.27	0.27
21.88	0.02	0.07	0.10%	0.01	0.06	0.27	0.27
68.13	0.05	0.23	0.00%	0.00	0.00	0.00	0.00
163.86	0.13	0.55	0.00%	0.00	0.00	0.00	0.00
163.86	0.13	0.55	0.00%	0.00	0.00	0.00	0.00
89.61	0.07	0.30	0.00%	0.00	0.00	0.00	0.00
95.39	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
94.01	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
119.44	0.09	0.40	0.00%	0.00	0.00	0.00	0.00
106.00	0.08	0.36	0.00%	0.00	0.00	0.00	0.00
93.13	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
88.32	0.07	0.30	0.00%	0.00	0.00	0.00	0.00
102.21	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
69.00	0.05	0.23	0.00%	0.00	0.00	0.00	0.00
60.74	0.05	0.20	0.00%	0.00	0.00	0.00	0.00
73.07	0.06	0.25	0.00%	0.00	0.00	0.00	0.00
121.10	0.09	0.41	0.00%	0.00	0.00	0.00	0.00
150.56	0.12	0.51	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
101.60	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
102.08	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
92.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
152.88	0.12	0.52	0.00%	0.00	0.00	0.00	0.00
202.70	0.16	0.68	0.00%	0.00	0.00	0.00	0.00
93.78	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
91.76	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
140.84	0.11	0.48	0.00%	0.00	0.00	0.00	0.00
143.93	0.11	0.49	0.00%	0.00	0.00	0.00	0.00
96.76	0.07	0.33	0.00%	0.00	0.00	0.00	0.00
100.35	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
148.64	0.11	0.50	0.00%	0.00	0.00	0.00	0.00
92.19	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
94.67	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
15.91	0.01	0.05	0.10%	0.01	0.04	0.20	0.20
15.91	0.01	0.05	0.10%	0.01	0.04	0.20	0.20
49.55	0.04	0.17	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.22	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
10.34	0.01	0.03	0.00%	0.00	0.00	0.00	0.00
2.75	0.00	0.01	0.00%	0.00	0.00	0.00	0.00
0.57	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
278.52	0.21	COMG 003		0.00	0.06	0.27	COMG 003

HAP-Organic
volatile

HAP-Organic
volatile

Methanol CAS# 67-56-1					Cumene CAS# 98-06-1		
(%Wt)	Uncontrolled		Uncontrolled	Limited	(%Wt)	Uncontrolled	
	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		(lb/gal)	(lb/hr)
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.20%	0.02	0.12	0.54	0.54	0.00%	0.00	0.00
0.20%	0.02	0.12	0.54	0.54	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.31
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.14
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.25
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.30%	0.02	0.36
0.00%	0.00	0.00	0.00	0.00	0.30%	0.02	0.36
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.24
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.16
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.19
0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.54
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.30%	0.03	0.40
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.10%	0.02	0.22
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.15
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.18
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.18
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.40%	0.04	0.52
0.00%	0.00	0.00	0.00	0.00	0.40%	0.04	0.52
0.20%	0.02	0.09	0.39	0.39	0.00%	0.00	0.00
0.20%	0.02	0.09	0.39	0.39	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.70%	0.05	0.19
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.01 0.12 0.54 COMG 003					0.03 0.72		

HAP-Organic volatile		Ethylbenzene CAS# 100-41-4					HAP-Organic volatile
Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)
0.00	0.00	0.10%	0.01	0.21	0.92	0.92	0.70%
0.00	0.00	0.10%	0.01	0.23	1.03	1.03	0.70%
0.00	0.00	0.50%	0.04	0.31	1.35	1.35	0.00%
0.00	0.00	0.50%	0.04	0.31	1.35	1.35	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.20%	0.03	0.38	1.66	1.66	2.70%
0.00	0.00	0.20%	0.03	0.38	1.66	1.66	2.70%
1.12	1.12	0.00%	0.00	0.00	0.00	0.00	0.00%
1.15	1.15	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
1.37	1.37	0.00%	0.00	0.00	0.00	0.00	0.00%
0.63	0.63	0.00%	0.00	0.00	0.00	0.00	0.00%
1.15	1.15	0.00%	0.00	0.00	0.00	0.00	0.00%
1.12	1.12	0.00%	0.00	0.00	0.00	0.00	0.00%
1.22	1.22	0.00%	0.00	0.00	0.00	0.00	0.00%
1.59	1.59	0.00%	0.00	0.00	0.00	0.00	0.00%
1.58	1.58	0.00%	0.00	0.00	0.00	0.00	0.00%
1.06	1.06	0.10%	0.01	0.12	0.53	0.53	0.00%
0.70	0.70	0.00%	0.00	0.00	0.00	0.00	0.00%
0.81	0.81	0.00%	0.00	0.00	0.00	0.00	0.00%
2.35	2.35	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
1.24	1.24	0.00%	0.00	0.00	0.00	0.00	0.00%
1.76	1.76	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.98	0.98	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
0.66	0.66	0.40%	0.04	0.61	2.66	2.66	0.00%
0.77	0.77	0.00%	0.00	0.00	0.00	0.00	0.00%
0.79	0.79	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
1.21	1.21	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
2.30	2.30	0.00%	0.00	0.00	0.00	0.00	0.00%
2.30	2.30	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.50%	0.04	0.22	0.99	0.99	0.00%
0.00	0.00	0.50%	0.04	0.22	0.99	0.99	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.81	0.81	3.90%	0.28	1.03	4.53	4.53	35.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
3.16	COMG 003		0.08	1.87	8.17	COMG 003	

HAP-Organic
volatile[illegible]

HAP-Organic
volatile

HAP-Organic
volatile

Limited (ton/yr)	Hexamethylene-1,6-Diisocyanate CAS# 822-06-0					Xyle	
	(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)
0.00	0.00%	0.00	0.00	0.00	0.00	0.30%	0.04
0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.06
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.20%	0.02	0.15	0.64	0.64	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13
0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.03
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.66	0.00%	0.00	0.00	0.00	0.00	1.80%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.20%	0.02	0.11	0.47	0.47	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.12	0.00%	0.00	0.00	0.00	0.00	16.60%	1.20
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
COMG 003		0.01	0.15	0.64	COMG 003		0.34

HAP-Organic
volatile

ne CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited			Uncontrolled	Uncontrolled	Limited
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.63	2.77	2.77	4.50%	0.58	9.50	41.62	41.62
0.94	4.10	4.10	3.60%	0.52	8.42	36.90	36.90
1.42	6.23	6.23	38.90%	2.99	24.06	105.39	105.39
1.42	6.23	6.23	38.90%	2.99	24.06	105.39	105.39
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.89	8.30	8.30	6.70%	0.85	12.69	55.59	55.59
1.89	8.30	8.30	6.70%	0.85	12.69	55.59	55.59
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.53	2.34	2.34
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.14	0.61	0.61	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.49	2.13	2.13	0.00%	0.00	0.00	0.00	0.00
0.16	0.70	0.70	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.11	0.47	0.47	21.00%	1.52	22.54	98.74	98.74
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.14	0.62	0.62	0.00%	0.00	0.00	0.00	0.00
0.13	0.59	0.59	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.73	11.97	11.97	0.20%	0.02	0.30	1.33	1.33
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.18	0.79	0.79	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
1.03	4.53	4.53	38.90%	2.99	17.50	76.65	76.65
1.03	4.53	4.53	38.90%	2.99	17.50	76.65	76.65
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.40	19.27	19.27	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
8.17	35.77	COMG 003		1.64	40.04	175.39	COMG 003

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI 81 - Side Loader Paint Booth Air Make-Up
STRU 95: MFG Robot Booth Paint
STRU 96: MFG Manual Booth Paint

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.13	4,044.1	35.4

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.404	1.77	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.340	1.49	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.031	0.13	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.031	0.13	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.031	0.13	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.022	0.10	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	485	2126	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.009	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	488	2138	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	2.02E-06	8.86E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.57E-07	1.56E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.49E-06	3.72E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.85E-06	2.13E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	3.03E-04	1.33E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	7.28E-03	3.19E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.47E-06	1.08E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.38E-05	6.02E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	8.09E-07	3.54E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.85E-08	2.13E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.45E-06	1.95E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.66E-06	2.48E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.40E-07	1.49E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.54E-06	6.73E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.05E-06	4.61E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.49E-06	3.72E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	9.71E-08	4.25E-07	COMG 003
Total HAPs =				3.35E-02	

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

McNeilus Truck & Manufacturing, Inc.

EQUI 82 - Side Loader Prime Booth

TREA 38: Side Loader Prime Booth Panel Filter

TREA 44: Side Loader Prime Booth Panel Filter

TREA 45: Side Loader Prime Booth Panel Filter

Filter Control Eff.: PM, PM10, and PM2.5 = 85%

99.7% 99.7%

STRU 97: Side Loader Prime Booth

STRU 98: Side Loader Prime Booth

Akzo Nobel	Product	Coating	Coating	Spray	Gun	Maximum
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)	Spray Rate (gal/hr)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	26	24.38
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	26	24.38
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	26	24.38
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	26	24.38
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	26	24.38
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	26	24.38
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	26	24.38
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	26	24.38
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	26	24.38
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	26	24.38
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	26	24.38
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	26	24.38
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	26	24.38
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	26	24.38
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	26	24.38
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	26	24.38
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	26	24.38
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	26	24.38
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	26	24.38
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	26	24.38
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	26	24.38
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	26	24.38
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	26	24.38
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	26	24.38
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	26	24.38
480972	Autocoat BT Toner B610	Topcoat	61%	2	26	24.38
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	26	24.38
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	26	24.38
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	26	24.38
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	26	24.38
509953	Autocoat BT Toner B627	Topcoat	61%	2	26	24.38
509957	Autocoat BT Toner B632	Topcoat	61%	2	26	24.38
509958	Autocoat BT Toner B649	Topcoat	61%	2	26	24.38
509959	Autocoat BT Toner B653	Topcoat	61%	2	26	24.38
509981	Autocoat BT Toner B664	Topcoat	61%	2	26	24.38
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	26	24.38
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	26	24.38
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	26	24.38
391191	Exempt Reducer	Reducer	15%	2	26	24.38
480460	AT105 Bus Reducer SRA	Reducer	15%	2	26	24.38
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	26	24.38
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	26	24.38
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	26	24.38

Max Em. Rate

Note 1: Limited HAP emissions calculated based on effective limit of VOC demonstrated in Title V total facility PTE calculations. Effect

Note 2: PM_{2.5} cannot physically exceed PM₁₀, therefore, PM_{2.5} set equivalent to PM₁₀ as a worst-case assumption.

Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)	Solids Content (%Wt)
12.93	75%	20.50%	2.65	43.29	189.60	COMG 003	79.71%
14.33	75%	17.93%	2.57	41.97	183.83	COMG 003	82.10%
7.69	75%	67.90%	5.22	42.00	183.96	COMG 003	32.30%
7.69	75%	67.90%	5.22	42.00	183.96	COMG 003	32.30%
9.10	75%	15.20%	1.38	11.13	48.73	COMG 003	85.00%
12.74	75%	21.11%	2.69	40.00	175.19	COMG 003	79.00%
12.74	75%	21.11%	2.69	40.00	175.19	COMG 003	79.00%
8.60	75%	36.40%	3.13	46.55	203.87	COMG 003	64.00%
8.81	75%	33.60%	2.96	44.01	192.78	COMG 003	66.50%
8.98	75%	35.80%	3.21	47.80	209.37	COMG 003	64.30%
10.48	75%	30.50%	3.20	47.53	208.17	COMG 003	70.00%
9.66	75%	32.71%	3.16	46.99	205.80	COMG 003	67.40%
8.80	75%	35.23%	3.10	46.09	201.89	COMG 003	65.00%
8.57	75%	36.70%	3.15	46.77	204.83	COMG 003	63.30%
9.37	75%	33.50%	3.14	46.67	204.42	COMG 003	67.00%
8.15	75%	47.98%	3.91	58.14	254.64	COMG 003	52.00%
8.11	75%	54.50%	4.42	65.72	287.85	COMG 003	46.00%
8.16	75%	44.49%	3.63	53.97	236.40	COMG 003	55.00%
10.78	75%	30.80%	3.32	49.36	216.22	COMG 003	69.00%
12.48	75%	26.10%	3.26	48.43	212.13	COMG 003	74.10%
7.22	75%	100.20%	7.23	107.57	471.14	COMG 003	0.00%
9.51	75%	34.38%	3.27	48.62	212.96	COMG 003	65.62%
9.50	75%	34.32%	3.26	48.47	212.31	COMG 003	66.00%
9.00	75%	37.00%	3.33	49.51	216.87	COMG 003	63.00%
12.45	75%	24.58%	3.06	45.50	199.28	COMG 003	75.42%
15.00	75%	17.40%	2.61	38.81	169.98	COMG 003	83.00%
9.00	75%	35.70%	3.21	47.77	209.25	COMG 003	64.00%
10.21	75%	44.86%	4.58	68.10	298.27	COMG 003	55.20%
11.85	75%	27.51%	3.26	48.47	212.31	COMG 003	73.00%
12.11	75%	27.00%	3.27	48.62	212.94	COMG 003	73.00%
8.95	75%	33.63%	3.01	44.75	196.03	COMG 003	66.40%
9.31	75%	33.70%	3.14	46.65	204.33	COMG 003	66.20%
12.14	75%	24.88%	3.02	44.90	196.68	COMG 003	75.20%
8.82	75%	35.90%	3.17	47.08	206.21	COMG 003	64.20%
8.81	75%	34.40%	3.03	45.06	197.37	COMG 003	66.00%
7.69	75%	67.90%	5.22	30.55	133.79	COMG 003	32.30%
7.69	75%	67.90%	5.22	30.55	133.79	COMG 003	32.30%
9.10	75%	15.20%	1.38	8.09	35.44	COMG 003	85.00%
7.19	75%	100.00%	7.19	26.29	115.14	COMG 003	0.00%
7.25	75%	95.86%	6.95	25.41	111.30	COMG 003	4.20%
6.89	75%	100.00%	6.89	25.19	110.34	COMG 003	37.50%
6.86	75%	90.00%	6.17	22.57	98.87	COMG 003	10.00%
7.07	75%	98.50%	6.96	25.46	111.52	COMG 003	2.00%
				164.40	720.08	237.00	

: of 237 tpy limit results in emissions of 10% of total unrestricted emissions.

Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
10.31	42.08	184.31	0.14	0.62	79.71%	10.31	42.08
11.76	48.03	210.39	0.16	0.71	82.10%	11.76	48.03
2.48	4.99	21.88	0.02	0.07	32.30%	2.48	4.99
2.48	4.99	21.88	0.02	0.07	32.30%	2.48	4.99
7.74	15.55	68.13	0.05	0.23	85.00%	7.74	15.55
10.06	37.41	163.86	0.13	0.55	79.00%	10.06	37.41
10.06	37.41	163.86	0.13	0.55	79.00%	10.06	37.41
5.50	20.46	89.61	0.07	0.30	64.00%	5.50	20.46
5.86	21.78	95.39	0.07	0.32	66.50%	5.86	21.78
5.77	21.46	94.01	0.07	0.32	64.30%	5.77	21.46
7.34	27.27	119.44	0.09	0.40	70.00%	7.34	27.27
6.51	24.20	106.00	0.08	0.36	67.40%	6.51	24.20
5.72	21.26	93.13	0.07	0.31	65.00%	5.72	21.26
5.42	20.17	88.32	0.07	0.30	63.30%	5.42	20.17
6.28	23.34	102.21	0.08	0.34	67.00%	6.28	23.34
4.24	15.75	69.00	0.05	0.23	52.00%	4.24	15.75
3.73	13.87	60.74	0.05	0.20	46.00%	3.73	13.87
4.49	16.68	73.07	0.06	0.25	55.00%	4.49	16.68
7.44	27.65	121.10	0.09	0.41	69.00%	7.44	27.65
9.25	34.38	150.56	0.12	0.51	74.10%	9.25	34.38
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.24	23.20	101.60	0.08	0.34	65.62%	6.24	23.20
6.27	23.31	102.08	0.08	0.34	66.00%	6.27	23.31
5.67	21.08	92.31	0.07	0.31	63.00%	5.67	21.08
9.39	34.90	152.88	0.12	0.52	75.42%	9.39	34.90
12.45	46.28	202.70	0.16	0.68	83.00%	12.45	46.28
5.76	21.41	93.78	0.07	0.32	64.00%	5.76	21.41
5.64	20.95	91.76	0.07	0.31	55.20%	5.64	20.95
8.65	32.16	140.84	0.11	0.48	73.00%	8.65	32.16
8.84	32.86	143.93	0.11	0.49	73.00%	8.84	32.86
5.94	22.09	96.76	0.07	0.33	66.40%	5.94	22.09
6.16	22.91	100.35	0.08	0.34	66.20%	6.16	22.91
9.13	33.94	148.64	0.11	0.50	75.20%	9.13	33.94
5.66	21.05	92.19	0.07	0.31	64.20%	5.66	21.05
5.81	21.61	94.67	0.07	0.32	66.00%	5.81	21.61
2.48	3.63	15.91	0.01	0.05	32.30%	2.48	3.63
2.48	3.63	15.91	0.01	0.05	32.30%	2.48	3.63
7.74	11.31	49.55	0.04	0.17	85.00%	7.74	11.31
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.30	0.28	1.22	0.00	0.00	4.20%	0.30	0.28
2.58	2.36	10.34	0.01	0.03	37.50%	2.58	2.36
0.69	0.63	2.75	0.00	0.01	10.00%	0.69	0.63
0.14	0.13	0.57	0.00	0.00	2.00%	0.14	0.13
63.59	278.52	0.21	COMG 003			63.59	

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0				
			(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)
184.31	0.14	0.62	0.00%	0.00	0.00	0.00	0.00
210.39	0.16	0.71	0.00%	0.00	0.00	0.00	0.00
21.88	0.02	0.07	0.10%	0.01	0.06	0.27	0.27
21.88	0.02	0.07	0.10%	0.01	0.06	0.27	0.27
68.13	0.05	0.23	0.00%	0.00	0.00	0.00	0.00
163.86	0.13	0.55	0.00%	0.00	0.00	0.00	0.00
163.86	0.13	0.55	0.00%	0.00	0.00	0.00	0.00
89.61	0.07	0.30	0.00%	0.00	0.00	0.00	0.00
95.39	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
94.01	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
119.44	0.09	0.40	0.00%	0.00	0.00	0.00	0.00
106.00	0.08	0.36	0.00%	0.00	0.00	0.00	0.00
93.13	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
88.32	0.07	0.30	0.00%	0.00	0.00	0.00	0.00
102.21	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
69.00	0.05	0.23	0.00%	0.00	0.00	0.00	0.00
60.74	0.05	0.20	0.00%	0.00	0.00	0.00	0.00
73.07	0.06	0.25	0.00%	0.00	0.00	0.00	0.00
121.10	0.09	0.41	0.00%	0.00	0.00	0.00	0.00
150.56	0.12	0.51	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
101.60	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
102.08	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
92.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
152.88	0.12	0.52	0.00%	0.00	0.00	0.00	0.00
202.70	0.16	0.68	0.00%	0.00	0.00	0.00	0.00
93.78	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
91.76	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
140.84	0.11	0.48	0.00%	0.00	0.00	0.00	0.00
143.93	0.11	0.49	0.00%	0.00	0.00	0.00	0.00
96.76	0.07	0.33	0.00%	0.00	0.00	0.00	0.00
100.35	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
148.64	0.11	0.50	0.00%	0.00	0.00	0.00	0.00
92.19	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
94.67	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
15.91	0.01	0.05	0.10%	0.01	0.04	0.20	0.20
15.91	0.01	0.05	0.10%	0.01	0.04	0.20	0.20
49.55	0.04	0.17	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.22	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
10.34	0.01	0.03	0.00%	0.00	0.00	0.00	0.00
2.75	0.00	0.01	0.00%	0.00	0.00	0.00	0.00
0.57	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
278.52	0.21	COMG 003		0.00	0.06	0.27	COMG 003

HAP-Organic
volatile

HAP-Organic
volatile

Methanol CAS# 67-56-1					Cumene CAS# 98-06-6		
(%Wt)	Uncontrolled		Uncontrolled	Limited	(%Wt)	Uncontrolled	
	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		(lb/gal)	(lb/hr)
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.20%	0.02	0.12	0.54	0.54	0.00%	0.00	0.00
0.20%	0.02	0.12	0.54	0.54	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.31
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.14
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.25
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.30%	0.02	0.36
0.00%	0.00	0.00	0.00	0.00	0.30%	0.02	0.36
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.24
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.16
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.19
0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.54
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.30%	0.03	0.40
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.10%	0.02	0.22
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.15
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.18
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.18
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.40%	0.04	0.52
0.00%	0.00	0.00	0.00	0.00	0.40%	0.04	0.52
0.20%	0.02	0.09	0.39	0.39	0.00%	0.00	0.00
0.20%	0.02	0.09	0.39	0.39	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.70%	0.05	0.19
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.01	0.12	0.54	COMG 003		0.03	0.72	

HAP-Organic volatile				Ethylbenzene CAS# 100-41-4			HAP-Organic volatile
Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)
0.00	0.00	0.10%	0.01	0.21	0.92	0.92	0.70%
0.00	0.00	0.10%	0.01	0.23	1.03	1.03	0.70%
0.00	0.00	0.50%	0.04	0.31	1.35	1.35	0.00%
0.00	0.00	0.50%	0.04	0.31	1.35	1.35	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.20%	0.03	0.38	1.66	1.66	2.70%
0.00	0.00	0.20%	0.03	0.38	1.66	1.66	2.70%
1.12	1.12	0.00%	0.00	0.00	0.00	0.00	0.00%
1.15	1.15	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
1.37	1.37	0.00%	0.00	0.00	0.00	0.00	0.00%
0.63	0.63	0.00%	0.00	0.00	0.00	0.00	0.00%
1.15	1.15	0.00%	0.00	0.00	0.00	0.00	0.00%
1.12	1.12	0.00%	0.00	0.00	0.00	0.00	0.00%
1.22	1.22	0.00%	0.00	0.00	0.00	0.00	0.00%
1.59	1.59	0.00%	0.00	0.00	0.00	0.00	0.00%
1.58	1.58	0.00%	0.00	0.00	0.00	0.00	0.00%
1.06	1.06	0.10%	0.01	0.12	0.53	0.53	0.00%
0.70	0.70	0.00%	0.00	0.00	0.00	0.00	0.00%
0.81	0.81	0.00%	0.00	0.00	0.00	0.00	0.00%
2.35	2.35	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
1.24	1.24	0.00%	0.00	0.00	0.00	0.00	0.00%
1.76	1.76	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.98	0.98	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
0.66	0.66	0.40%	0.04	0.61	2.66	2.66	0.00%
0.77	0.77	0.00%	0.00	0.00	0.00	0.00	0.00%
0.79	0.79	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
1.21	1.21	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
2.30	2.30	0.00%	0.00	0.00	0.00	0.00	0.00%
2.30	2.30	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.50%	0.04	0.22	0.99	0.99	0.00%
0.00	0.00	0.50%	0.04	0.22	0.99	0.99	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.81	0.81	3.90%	0.28	1.03	4.53	4.53	35.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
3.16	COMG 003		0.08	1.87	8.17	COMG 003	

HAP-Organic
volatile[illegible]

HAP-Organic
volatile

HAP-Organic
volatile

Limited (ton/yr)	Hexamethylene-1,6-Diisocyanate CAS# 822-06-0					Xyle	
	(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)
0.00	0.00%	0.00	0.00	0.00	0.00	0.30%	0.04
0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.06
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.20%	0.02	0.15	0.64	0.64	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13
0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.03
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.66	0.00%	0.00	0.00	0.00	0.00	1.80%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.20%	0.02	0.11	0.47	0.47	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.12	0.00%	0.00	0.00	0.00	0.00	16.60%	1.20
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
COMG 003		0.01	0.15	0.64	COMG 003		0.34

HAP-Organic
volatile

ne CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited			Uncontrolled	Uncontrolled	Limited
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.63	2.77	2.77	4.50%	0.58	9.50	41.62	41.62
0.94	4.10	4.10	3.60%	0.52	8.42	36.90	36.90
1.42	6.23	6.23	38.90%	2.99	24.06	105.39	105.39
1.42	6.23	6.23	38.90%	2.99	24.06	105.39	105.39
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.89	8.30	8.30	6.70%	0.85	12.69	55.59	55.59
1.89	8.30	8.30	6.70%	0.85	12.69	55.59	55.59
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.53	2.34	2.34
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.14	0.61	0.61	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.49	2.13	2.13	0.00%	0.00	0.00	0.00	0.00
0.16	0.70	0.70	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.11	0.47	0.47	21.00%	1.52	22.54	98.74	98.74
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.14	0.62	0.62	0.00%	0.00	0.00	0.00	0.00
0.13	0.59	0.59	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.73	11.97	11.97	0.20%	0.02	0.30	1.33	1.33
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.18	0.79	0.79	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
1.03	4.53	4.53	38.90%	2.99	17.50	76.65	76.65
1.03	4.53	4.53	38.90%	2.99	17.50	76.65	76.65
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.40	19.27	19.27	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
8.17	35.77	COMG 003		1.64	40.04	175.39	COMG 003



Computation

Job No. NA

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI 83 - Side Loader Prime Booth Air Make-Up

Sheets 1

STRU 97: Side Loader Prime Booth

STRU 98: Side Loader Prime Booth

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.13	4,044.1	35.4

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.404	1.77	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.340	1.49	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.031	0.13	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.031	0.13	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.031	0.13	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.022	0.10	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	485	2126	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.009	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	488	2138	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	2.02E-06	8.86E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.57E-07	1.56E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.49E-06	3.72E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.85E-06	2.13E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	3.03E-04	1.33E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	7.28E-03	3.19E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.47E-06	1.08E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.38E-05	6.02E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	8.09E-07	3.54E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.85E-08	2.13E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.45E-06	1.95E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.66E-06	2.48E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.40E-07	1.49E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.54E-06	6.73E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.05E-06	4.61E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.49E-06	3.72E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	9.71E-08	4.25E-07	COMG 003
Total HAPs =				3.35E-02	

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

McNeilus Truck & Manufacturing, Inc.

EQUI 84 - Side Loader Clear Coat Booth

TREA 40: Side Loader Clear Coat Booth Panel Filter

TREA 46: Side Loader Clear Coat Booth Panel Filter

TREA 47: Side Loader Clear Coat Booth Panel Filter

Filter Control Eff.: PM, PM10, and PM2.5 = 85%

99.7% 99.7%

STRU 99: Side Loader Clear Coat Booth Air Make-up

STRU 100: Side Loader Clear Coat Booth Air Make-up

Akzo Nobel	Product	Coating	Coating	Spray	Gun	Maximum
Product Name	Description	Type	Mix (%)	Gun (#)	Capacity (oz/min)	Spray Rate (gal/hr)
483378	Autocoat LV360Primer EP Grey	Primer	67%	2	26	24.38
531421	Autocoat LV CIP Epoxy Primer White	Primer	67%	2	26	24.38
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	33%	2	26	24.38
384295	Autocryl LV EP Cip Hardener	Hardener	33%	2	26	24.38
480663	Autocoat BT LV650 Hardener	Hardener	33%	2	26	24.38
381073	Autocryl LV EP Chassis Black	Topcoat	61%	2	26	24.38
381074	Autocryl LV EP Chassis Black	Topcoat	61%	2	26	24.38
391667	Autocoat BT B616 Mixing Black	Topcoat	61%	2	26	24.38
391670	Autocoat BT B622 Brilliant Red Orange	Topcoat	61%	2	26	24.38
391673	Autocoat BT B625 Brilliant Red	Topcoat	61%	2	26	24.38
391677	Autocoat BT B642 Bright Yellow Oxide	Topcoat	61%	2	26	24.38
391679	Autocoat BT B641 Orange Yellow	Topcoat	61%	2	26	24.38
391686	Autocoat BT B662 Bright Blue Transparent	Topcoat	61%	2	26	24.38
391687	Autocoat BT B671 Violet Blue Transparent	Topcoat	61%	2	26	24.38
396206	Autocoat BT B648 Light Yellow	Topcoat	61%	2	26	24.38
396716	Autocoat BT LV 650 Topcoat Solid Convertor B603	Topcoat	61%	2	26	24.38
396717	Autocoat BT LV 650 Topcoat White Convertor B604	Topcoat	61%	2	26	24.38
397352	Autocoat BT LV 650 Topcoat Metallic Converter B602	Topcoat	61%	2	26	24.38
480588	Autocoat LV 650 TC RM FLNA10785	Topcoat	61%	2	26	24.38
480590	Autocoat LV 650 TC RM FLNA4002	Topcoat	61%	2	26	24.38
480593	Autocoat LV 650 TC RM FLNA40073	Topcoat	61%	2	26	24.38
480595	Autocoat BT LV650 TC RM FLNA50661	Topcoat	61%	2	26	24.38
480596	Autocoat BT LV 650 Topcoat RM FLNA50661	Topcoat	61%	2	26	24.38
480600	Autocoat LV 650 TC RM FLNA6601	Topcoat	61%	2	26	24.38
480604	Autocoat BT LV650 TC RM NAV9219	Topcoat	61%	2	26	24.38
480972	Autocoat BT Toner B610	Topcoat	61%	2	26	24.38
482377	Autocoat LV 650TC RM FLNA5230	Topcoat	61%	2	26	24.38
483296	Autocoat LV 650 TC RM Matte Black	Topcoat	61%	2	26	24.38
509756	Autocoat BT LV650 Topcoat RM FLNA40499	Topcoat	61%	2	26	24.38
509938	Autocoat BT LV 650 TC RM FLNA40309	Topcoat	61%	2	26	24.38
509953	Autocoat BT Toner B627	Topcoat	61%	2	26	24.38
509957	Autocoat BT Toner B632	Topcoat	61%	2	26	24.38
509958	Autocoat BT Toner B649	Topcoat	61%	2	26	24.38
509959	Autocoat BT Toner B653	Topcoat	61%	2	26	24.38
509981	Autocoat BT Toner B664	Topcoat	61%	2	26	24.38
384291	Autocoat LV Cip Epoxy Primer Hardener	Hardener	24%	2	26	24.38
384295	Autocryl LV EP Cip Hardener	Hardener	24%	2	26	24.38
480663	Autocoat BT LV650 Hardener	Hardener	24%	2	26	24.38
391191	Exempt Reducer	Reducer	15%	2	26	24.38
480460	AT105 Bus Reducer SRA	Reducer	15%	2	26	24.38
480494	Autocoat BT LV 650 Reducer Slow	Reducer	15%	2	26	24.38
480495	Autocoat BT LV 650 Reducer Medium	Reducer	15%	2	26	24.38
483297	Autocoat LV 650 TC Reducer Accelerator	Reducer	15%	2	26	24.38

Max Em. Rate

Note 1: Limited HAP emissions calculated based on effective limit of VOC demonstrated in Title V total facility PTE calculations. Eff

Note 2: PM_{2.5} cannot physically exceed PM₁₀, therefore, PM_{2.5} set equivalent to PM₁₀ as a worst-case assumption.

Material Density (lb/gal)	Transfer Efficiency (%)	VOC Content (%Wt)	VOC Content (lb/gal)	VOC Uncontrolled (lb/hr)	VOC Uncontrolled (ton/yr)	VOC Limited (ton/yr)	Solids Content (%Wt)
12.93	75%	20.50%	2.65	43.29	189.60	COMG 003	79.71%
14.33	75%	17.93%	2.57	41.97	183.83	COMG 003	82.10%
7.69	75%	67.90%	5.22	42.00	183.96	COMG 003	32.30%
7.69	75%	67.90%	5.22	42.00	183.96	COMG 003	32.30%
9.10	75%	15.20%	1.38	11.13	48.73	COMG 003	85.00%
12.74	75%	21.11%	2.69	40.00	175.19	COMG 003	79.00%
12.74	75%	21.11%	2.69	40.00	175.19	COMG 003	79.00%
8.60	75%	36.40%	3.13	46.55	203.87	COMG 003	64.00%
8.81	75%	33.60%	2.96	44.01	192.78	COMG 003	66.50%
8.98	75%	35.80%	3.21	47.80	209.37	COMG 003	64.30%
10.48	75%	30.50%	3.20	47.53	208.17	COMG 003	70.00%
9.66	75%	32.71%	3.16	46.99	205.80	COMG 003	67.40%
8.80	75%	35.23%	3.10	46.09	201.89	COMG 003	65.00%
8.57	75%	36.70%	3.15	46.77	204.83	COMG 003	63.30%
9.37	75%	33.50%	3.14	46.67	204.42	COMG 003	67.00%
8.15	75%	47.98%	3.91	58.14	254.64	COMG 003	52.00%
8.11	75%	54.50%	4.42	65.72	287.85	COMG 003	46.00%
8.16	75%	44.49%	3.63	53.97	236.40	COMG 003	55.00%
10.78	75%	30.80%	3.32	49.36	216.22	COMG 003	69.00%
12.48	75%	26.10%	3.26	48.43	212.13	COMG 003	74.10%
7.22	75%	100.20%	7.23	107.57	471.14	COMG 003	0.00%
9.51	75%	34.38%	3.27	48.62	212.96	COMG 003	65.62%
9.50	75%	34.32%	3.26	48.47	212.31	COMG 003	66.00%
9.00	75%	37.00%	3.33	49.51	216.87	COMG 003	63.00%
12.45	75%	24.58%	3.06	45.50	199.28	COMG 003	75.42%
15.00	75%	17.40%	2.61	38.81	169.98	COMG 003	83.00%
9.00	75%	35.70%	3.21	47.77	209.25	COMG 003	64.00%
10.21	75%	44.86%	4.58	68.10	298.27	COMG 003	55.20%
11.85	75%	27.51%	3.26	48.47	212.31	COMG 003	73.00%
12.11	75%	27.00%	3.27	48.62	212.94	COMG 003	73.00%
8.95	75%	33.63%	3.01	44.75	196.03	COMG 003	66.40%
9.31	75%	33.70%	3.14	46.65	204.33	COMG 003	66.20%
12.14	75%	24.88%	3.02	44.90	196.68	COMG 003	75.20%
8.82	75%	35.90%	3.17	47.08	206.21	COMG 003	64.20%
8.81	75%	34.40%	3.03	45.06	197.37	COMG 003	66.00%
7.69	75%	67.90%	5.22	30.55	133.79	COMG 003	32.30%
7.69	75%	67.90%	5.22	30.55	133.79	COMG 003	32.30%
9.10	75%	15.20%	1.38	8.09	35.44	COMG 003	85.00%
7.19	75%	100.00%	7.19	26.29	115.14	COMG 003	0.00%
7.25	75%	95.86%	6.95	25.41	111.30	COMG 003	4.20%
6.89	75%	100.00%	6.89	25.19	110.34	COMG 003	37.50%
6.86	75%	90.00%	6.17	22.57	98.87	COMG 003	10.00%
7.07	75%	98.50%	6.96	25.46	111.52	COMG 003	2.00%
				164.40	720.08	237.00	

act of 237 tpy limit results in emissions of 10% of total unrestricted emissions.

Solids Content (lb/gal)	PM/PM ₁₀ Uncontrolled (lb/hr)	PM/PM ₁₀ Uncontrolled (ton/yr)	PM/PM ₁₀ Limited (lb/hr)	PM/PM ₁₀ Limited (ton/yr)	Solids Content (%Wt)	Solids Content (lb/gal)	PM _{2.5} Uncontrolled (lb/hr)
10.31	42.08	184.31	0.14	0.62	79.71%	10.31	42.08
11.76	48.03	210.39	0.16	0.71	82.10%	11.76	48.03
2.48	4.99	21.88	0.02	0.07	32.30%	2.48	4.99
2.48	4.99	21.88	0.02	0.07	32.30%	2.48	4.99
7.74	15.55	68.13	0.05	0.23	85.00%	7.74	15.55
10.06	37.41	163.86	0.13	0.55	79.00%	10.06	37.41
10.06	37.41	163.86	0.13	0.55	79.00%	10.06	37.41
5.50	20.46	89.61	0.07	0.30	64.00%	5.50	20.46
5.86	21.78	95.39	0.07	0.32	66.50%	5.86	21.78
5.77	21.46	94.01	0.07	0.32	64.30%	5.77	21.46
7.34	27.27	119.44	0.09	0.40	70.00%	7.34	27.27
6.51	24.20	106.00	0.08	0.36	67.40%	6.51	24.20
5.72	21.26	93.13	0.07	0.31	65.00%	5.72	21.26
5.42	20.17	88.32	0.07	0.30	63.30%	5.42	20.17
6.28	23.34	102.21	0.08	0.34	67.00%	6.28	23.34
4.24	15.75	69.00	0.05	0.23	52.00%	4.24	15.75
3.73	13.87	60.74	0.05	0.20	46.00%	3.73	13.87
4.49	16.68	73.07	0.06	0.25	55.00%	4.49	16.68
7.44	27.65	121.10	0.09	0.41	69.00%	7.44	27.65
9.25	34.38	150.56	0.12	0.51	74.10%	9.25	34.38
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6.24	23.20	101.60	0.08	0.34	65.62%	6.24	23.20
6.27	23.31	102.08	0.08	0.34	66.00%	6.27	23.31
5.67	21.08	92.31	0.07	0.31	63.00%	5.67	21.08
9.39	34.90	152.88	0.12	0.52	75.42%	9.39	34.90
12.45	46.28	202.70	0.16	0.68	83.00%	12.45	46.28
5.76	21.41	93.78	0.07	0.32	64.00%	5.76	21.41
5.64	20.95	91.76	0.07	0.31	55.20%	5.64	20.95
8.65	32.16	140.84	0.11	0.48	73.00%	8.65	32.16
8.84	32.86	143.93	0.11	0.49	73.00%	8.84	32.86
5.94	22.09	96.76	0.07	0.33	66.40%	5.94	22.09
6.16	22.91	100.35	0.08	0.34	66.20%	6.16	22.91
9.13	33.94	148.64	0.11	0.50	75.20%	9.13	33.94
5.66	21.05	92.19	0.07	0.31	64.20%	5.66	21.05
5.81	21.61	94.67	0.07	0.32	66.00%	5.81	21.61
2.48	3.63	15.91	0.01	0.05	32.30%	2.48	3.63
2.48	3.63	15.91	0.01	0.05	32.30%	2.48	3.63
7.74	11.31	49.55	0.04	0.17	85.00%	7.74	11.31
0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.30	0.28	1.22	0.00	0.00	4.20%	0.30	0.28
2.58	2.36	10.34	0.01	0.03	37.50%	2.58	2.36
0.69	0.63	2.75	0.00	0.01	10.00%	0.69	0.63
0.14	0.13	0.57	0.00	0.00	2.00%	0.14	0.13
63.59	278.52	0.21	COMG 003			63.59	

HAP-Organic
volatile

PM _{2.5} Uncontrolled (ton/yr)	PM _{2.5} Limited (lb/hr)	PM _{2.5} Limited (ton/yr)	Fomaldehyde CAS# 50-00-0				
			(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)
184.31	0.14	0.62	0.00%	0.00	0.00	0.00	0.00
210.39	0.16	0.71	0.00%	0.00	0.00	0.00	0.00
21.88	0.02	0.07	0.10%	0.01	0.06	0.27	0.27
21.88	0.02	0.07	0.10%	0.01	0.06	0.27	0.27
68.13	0.05	0.23	0.00%	0.00	0.00	0.00	0.00
163.86	0.13	0.55	0.00%	0.00	0.00	0.00	0.00
163.86	0.13	0.55	0.00%	0.00	0.00	0.00	0.00
89.61	0.07	0.30	0.00%	0.00	0.00	0.00	0.00
95.39	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
94.01	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
119.44	0.09	0.40	0.00%	0.00	0.00	0.00	0.00
106.00	0.08	0.36	0.00%	0.00	0.00	0.00	0.00
93.13	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
88.32	0.07	0.30	0.00%	0.00	0.00	0.00	0.00
102.21	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
69.00	0.05	0.23	0.00%	0.00	0.00	0.00	0.00
60.74	0.05	0.20	0.00%	0.00	0.00	0.00	0.00
73.07	0.06	0.25	0.00%	0.00	0.00	0.00	0.00
121.10	0.09	0.41	0.00%	0.00	0.00	0.00	0.00
150.56	0.12	0.51	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
101.60	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
102.08	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
92.31	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
152.88	0.12	0.52	0.00%	0.00	0.00	0.00	0.00
202.70	0.16	0.68	0.00%	0.00	0.00	0.00	0.00
93.78	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
91.76	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
140.84	0.11	0.48	0.00%	0.00	0.00	0.00	0.00
143.93	0.11	0.49	0.00%	0.00	0.00	0.00	0.00
96.76	0.07	0.33	0.00%	0.00	0.00	0.00	0.00
100.35	0.08	0.34	0.00%	0.00	0.00	0.00	0.00
148.64	0.11	0.50	0.00%	0.00	0.00	0.00	0.00
92.19	0.07	0.31	0.00%	0.00	0.00	0.00	0.00
94.67	0.07	0.32	0.00%	0.00	0.00	0.00	0.00
15.91	0.01	0.05	0.10%	0.01	0.04	0.20	0.20
15.91	0.01	0.05	0.10%	0.01	0.04	0.20	0.20
49.55	0.04	0.17	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.22	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
10.34	0.01	0.03	0.00%	0.00	0.00	0.00	0.00
2.75	0.00	0.01	0.00%	0.00	0.00	0.00	0.00
0.57	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
278.52	0.21	COMG 003		0.00	0.06	0.27	COMG 003

HAP-Organic
volatile

HAP-Organic
volatile

Methanol CAS# 67-56-1					Cumene CAS# 98-06-6		
(%Wt)	Uncontrolled		Uncontrolled	Limited	(%Wt)	Uncontrolled	
	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)		(lb/gal)	(lb/hr)
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.20%	0.02	0.12	0.54	0.54	0.00%	0.00	0.00
0.20%	0.02	0.12	0.54	0.54	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.31
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.14
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.26
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.25
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.30%	0.02	0.36
0.00%	0.00	0.00	0.00	0.00	0.30%	0.02	0.36
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.24
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.16
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.19
0.00%	0.00	0.00	0.00	0.00	0.50%	0.04	0.54
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.30%	0.03	0.40
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.10%	0.02	0.22
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.15
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.18
0.00%	0.00	0.00	0.00	0.00	0.10%	0.01	0.18
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.27
0.00%	0.00	0.00	0.00	0.00	0.20%	0.02	0.28
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.40%	0.04	0.52
0.00%	0.00	0.00	0.00	0.00	0.40%	0.04	0.52
0.20%	0.02	0.09	0.39	0.39	0.00%	0.00	0.00
0.20%	0.02	0.09	0.39	0.39	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.70%	0.05	0.19
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.00%	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
0.01	0.12	0.54	COMG 003		0.03	0.72	

HAP-Organic volatile				Ethylbenzene CAS# 100-41-4			HAP-Organic volatile
Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)	Uncontrolled (lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)
0.00	0.00	0.10%	0.01	0.21	0.92	0.92	0.70%
0.00	0.00	0.10%	0.01	0.23	1.03	1.03	0.70%
0.00	0.00	0.50%	0.04	0.31	1.35	1.35	0.00%
0.00	0.00	0.50%	0.04	0.31	1.35	1.35	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.20%	0.03	0.38	1.66	1.66	2.70%
0.00	0.00	0.20%	0.03	0.38	1.66	1.66	2.70%
1.12	1.12	0.00%	0.00	0.00	0.00	0.00	0.00%
1.15	1.15	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
1.37	1.37	0.00%	0.00	0.00	0.00	0.00	0.00%
0.63	0.63	0.00%	0.00	0.00	0.00	0.00	0.00%
1.15	1.15	0.00%	0.00	0.00	0.00	0.00	0.00%
1.12	1.12	0.00%	0.00	0.00	0.00	0.00	0.00%
1.22	1.22	0.00%	0.00	0.00	0.00	0.00	0.00%
1.59	1.59	0.00%	0.00	0.00	0.00	0.00	0.00%
1.58	1.58	0.00%	0.00	0.00	0.00	0.00	0.00%
1.06	1.06	0.10%	0.01	0.12	0.53	0.53	0.00%
0.70	0.70	0.00%	0.00	0.00	0.00	0.00	0.00%
0.81	0.81	0.00%	0.00	0.00	0.00	0.00	0.00%
2.35	2.35	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
1.24	1.24	0.00%	0.00	0.00	0.00	0.00	0.00%
1.76	1.76	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.98	0.98	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
0.66	0.66	0.40%	0.04	0.61	2.66	2.66	0.00%
0.77	0.77	0.00%	0.00	0.00	0.00	0.00	0.00%
0.79	0.79	0.00%	0.00	0.00	0.00	0.00	0.00%
1.17	1.17	0.00%	0.00	0.00	0.00	0.00	0.00%
1.21	1.21	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
2.30	2.30	0.00%	0.00	0.00	0.00	0.00	0.00%
2.30	2.30	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.50%	0.04	0.22	0.99	0.99	0.00%
0.00	0.00	0.50%	0.04	0.22	0.99	0.99	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.81	0.81	3.90%	0.28	1.03	4.53	4.53	35.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00%
3.16	COMG 003		0.08	1.87	8.17	COMG 003	

volatile

[illegible]

HAP-Organic volatile			HAP-Organic volatile				
Limited (ton/yr)	Hexamethylene-1,6-Diisocyanate CAS# 822-06-0					Xylene	
	(%Wt)	(lb/gal)	(lb/hr)	Uncontrolled (ton/yr)	Limited (ton/yr)	(%Wt)	(lb/gal)
0.00	0.00%	0.00	0.00	0.00	0.00	0.30%	0.04
0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.06
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.20%	0.02	0.15	0.64	0.64	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13
0.00	0.00%	0.00	0.00	0.00	0.00	1.00%	0.13
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.40%	0.03
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	0.10%	0.01
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.00%	0.00	0.00	0.00	0.00	2.30%	0.18
0.00	0.20%	0.02	0.11	0.47	0.47	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.12	0.00%	0.00	0.00	0.00	0.00	16.60%	1.20
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
0.00	0.00%	0.00	0.00	0.00	0.00	0.00%	0.00
COMG 003	0.01	0.15	0.64	COMG 003	0.34		

HAP-Organic
volatile

ne CAS# 1330-20-7			Glycol Ethers CAS# NA				
Uncontrolled	Uncontrolled	Limited			Uncontrolled	Uncontrolled	Limited
(lb/hr)	(ton/yr)	(ton/yr)	(%Wt)	(lb/gal)	(lb/hr)	(ton/yr)	(ton/yr)
0.63	2.77	2.77	4.50%	0.58	9.50	41.62	41.62
0.94	4.10	4.10	3.60%	0.52	8.42	36.90	36.90
1.42	6.23	6.23	38.90%	2.99	24.06	105.39	105.39
1.42	6.23	6.23	38.90%	2.99	24.06	105.39	105.39
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
1.89	8.30	8.30	6.70%	0.85	12.69	55.59	55.59
1.89	8.30	8.30	6.70%	0.85	12.69	55.59	55.59
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.40%	0.04	0.53	2.34	2.34
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.14	0.61	0.61	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.12	0.53	0.53	0.00%	0.00	0.00	0.00	0.00
0.49	2.13	2.13	0.00%	0.00	0.00	0.00	0.00
0.16	0.70	0.70	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.11	0.47	0.47	21.00%	1.52	22.54	98.74	98.74
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.14	0.62	0.62	0.00%	0.00	0.00	0.00	0.00
0.13	0.59	0.59	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
2.73	11.97	11.97	0.20%	0.02	0.30	1.33	1.33
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.18	0.79	0.79	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
0.13	0.57	0.57	0.00%	0.00	0.00	0.00	0.00
1.03	4.53	4.53	38.90%	2.99	17.50	76.65	76.65
1.03	4.53	4.53	38.90%	2.99	17.50	76.65	76.65
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
4.40	19.27	19.27	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
8.17	35.77	COMG 003		1.64	40.04	175.39	COMG 003

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI 85 - Side Loader Clear Coat Booth Air Make-Up
STRU 99: Side Loader Clear Coat Booth Air Make-Up
STRU 100: Side Loader Clear Coat Booth Air Make-Up

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.13	4,044.1	35.4

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.404	1.77	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.340	1.49	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.031	0.13	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.031	0.13	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.031	0.13	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.022	0.10	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	485	2126	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.009	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	488	2138	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	2.02E-06	8.86E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.57E-07	1.56E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	8.49E-06	3.72E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.85E-06	2.13E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	3.03E-04	1.33E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	7.28E-03	3.19E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.47E-06	1.08E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.38E-05	6.02E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	8.09E-07	3.54E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.85E-08	2.13E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	4.45E-06	1.95E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	5.66E-06	2.48E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	3.40E-07	1.49E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.54E-06	6.73E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	1.05E-06	4.61E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	8.49E-06	3.72E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	9.71E-08	4.25E-07	COMG 003
Total HAPs =				3.35E-02	

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4



Computation

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 86 - Side Loader Curing Oven STRU 101 - Side Loader Curing Oven

Job No.	NA
Computed	GJR
Checked	MM
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.65	1,617.6	14.2

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.162	0.71	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.136	0.60	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.012	0.05	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.012	0.05	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.012	0.05	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.009	0.04	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	194	850	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.004	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.004	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	195	855	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	8.09E-07	3.54E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.43E-07	6.25E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.40E-06	1.49E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	1.94E-06	8.50E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.21E-04	5.31E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	2.91E-03	1.28E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	9.87E-07	4.32E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	5.50E-06	2.41E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	3.24E-07	1.42E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	1.94E-08	8.50E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	1.78E-06	7.79E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.26E-06	9.92E-06	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.36E-07	5.95E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	6.15E-07	2.69E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	4.21E-07	1.84E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	3.40E-06	1.49E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	3.88E-08	1.70E-07	COMG 003
Total HAPs =				1.34E-02	

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI 87 - Monorail Blast Booth

Sheets 1

STRU 102 - Monorail Blast Booth Stack (vents internally)

Annual total from Matt (review call 9/9/22)

lbs/year

Shot Blasting			
Hours	Shot ^a (lbs)	Shot (lb/hr)	Flowrate (acfm)
8,760	263,560	30	9,000

IPER:	
Limit	Emission Rate
gr/dscf	gr/dscf
0.092	0.011

Criteria Air Pollutants	Uncontrolled Emission Factor (lb/1000 lbs)	Control Efficiency	Uncontrolled Pollutant Emissions	
		(%)	lb/hr	TPY
Particulate Matter (PM) ^b	27.00	99	0.81	3.56
Particulate Matter < 10 Microns (PM ₁₀) ^b	13.00	93	0.39	1.71
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	1.30	93	0.04	0.17

Notes:
^a Amount of shot based on 2015 usage x 110%

^b Emission factors from AP-42 (9/97), Table 13.2.6-1. Uncontrolled/Indoor.

^c Control efficiencies from Mn. Rule 7011.0070.

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MM

Task EQUI 88 - Various Power Washer Heaters

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.86	1,823.5	16.0

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.182	0.80	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.153	0.67	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.014	0.06	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.014	0.06	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.014	0.06	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.010	0.04	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	219	958	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.004	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.004	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	220	964	COMG 003

Hazardous Air Pollutants	CAS#	Emission Factor	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	9.12E-07	3.99E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.61E-07	7.04E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.83E-06	1.68E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	2.19E-06	9.58E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.37E-04	5.99E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	3.28E-03	1.44E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	1.11E-06	4.87E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	6.20E-06	2.72E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	3.65E-07	1.60E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	2.19E-08	9.58E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	2.01E-06	8.79E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.55E-06	1.12E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.53E-07	6.71E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	6.93E-07	3.04E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	4.74E-07	2.08E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	3.83E-06	1.68E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	4.38E-08	1.92E-07	COMG 003
Total HAPs =			1.51E-02		

Notes:
^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

^f Uses the capacity of the highest power washer heater (0.51 MMBtu/hr)

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	EQUI 89 - JPDJ Emergency Generator

Computed	GJR
Checked	MLM
Sheets	1

Natural Gas-Fired Standby Generator				
Hours	Horsepower (HP)	Fuel Input (scfh)	Heat Content (Btu/scf)	Heat Input (MMBtu/hr)
500	184	1264.7	1,020	1.29

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Pollutant Emissions		
			lb/hr	TPY	limited tpy
Nitrogen Oxides (NO _x) ^a	10102-43-9	6.30E-01	8.13E-01	2.03E-01	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	1.26E+00	1.63E+00	4.06E-01	COMG 003
Particulate Matter (PM) ^b	-	1.94E-02	2.50E-02	6.26E-03	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	1.94E-02	2.50E-02	6.26E-03	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	1.94E-02	2.50E-02	6.26E-03	COMG 003
Volatile Organic Compounds (VOC) ^a	-	3.15E-01	4.06E-01	1.02E-01	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	7.59E-04	1.90E-04	COMG 003
Carbon Dioxide (CO ₂) ^b	-	1.10E+02	1.42E+02	3.55E+01	COMG 003
Methane (CH ₄) ^c	-	2.21E-03	2.84E-03	7.11E-04	COMG 003
Nitrous Oxide (N ₂ O) ^c	-	2.21E-04	2.84E-04	7.11E-05	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^d	-	NA	1.42E+02	3.55E+01	COMG 003

Notes:

^a Emission factors from 40 CFR 60, Subpart JJJJ, Table 1, Engines >130 HP: NO_x - 2.0 g/HP-hr, CO - 4.0 g/HP-hr, VOC - 1

^b Emission factors from AP-42 (10/24) Table 3.2-3

^c Emission factors from 40 CFR 98, Subpart C, Table C-2, CH₄ - 1.0E-03 kg/MMBtu, N₂O - 1.0E-04 kg/MMBtu

^d Global Warming Potential from 40 CFR 98, Subpart A, Table A-1, CH₄ - 28, N₂O - 298

Hazardous Air Pollutants	Emission Factor (lb/MMBtu)	Pollutant Emissions		
		lb/hr	TPY	limited tpy
1,1,2,2-Tetrachloroethane	2.53E-05	3.26E-05	8.16E-06	COMG 003
1,1,2-Trichloroethane	1.53E-05	1.97E-05	4.93E-06	COMG 003
1,3-Butadiene	6.63E-04	8.55E-04	2.14E-04	COMG 003
1,3-Dichloropropene	1.27E-05	1.64E-05	4.10E-06	COMG 003
Acetaldehyde	2.79E-03	3.60E-03	9.00E-04	COMG 003
Acrolein	2.63E-03	3.39E-03	8.48E-04	COMG 003
Benzene	1.58E-03	2.04E-03	5.10E-04	COMG 003
Carbon Tetrachloride	1.77E-05	2.28E-05	5.71E-06	COMG 003
Chlorobenzene	1.29E-05	1.66E-05	4.16E-06	COMG 003
Chloroform	1.37E-05	1.77E-05	4.42E-06	COMG 003
Ethylbenzene	2.48E-05	3.20E-05	8.00E-06	COMG 003
Ethylene Dibromide	2.13E-05	2.75E-05	6.87E-06	COMG 003
Formaldehyde	2.05E-02	2.64E-02	6.61E-03	COMG 003
Methylene Chloride	4.12E-05	5.31E-05	1.33E-05	COMG 003
Naphthalene	9.71E-05	1.25E-04	3.13E-05	COMG 003
POM	1.41E-04	1.82E-04	4.55E-05	COMG 003
Styrene	1.19E-05	1.54E-05	3.84E-06	COMG 003
Toluene	5.58E-04	7.20E-04	1.80E-04	COMG 003
Vinyl Chloride	7.18E-06	9.26E-06	2.32E-06	COMG 003
Xylene	1.95E-04	2.52E-04	6.29E-05	COMG 003

Notes:

^b Emission factors from AP-42 (10/24) Table 3.2-3

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked MLM

Task EQUI 90 - HR Emergency Generator

Sheets 1

Natural Gas-Fired Standby Generator				
Hours	Horsepower (HP)	Fuel Input (scfh)	Heat Content (Btu/scf)	Heat Input (MMBtu/hr)
500	154	1280	1,020	1.31

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Pollutant Emissions		
			lb/hr	TPY	limited tpy
Nitrogen Oxides (NO _x) ^a	10102-43-9	5.18E-01	6.79E-01	1.70E-01	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	1.04E+00	1.36E+00	3.40E-01	COMG 003
Particulate Matter (PM) ^b	-	1.94E-02	2.54E-02	6.36E-03	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	1.94E-02	2.54E-02	6.36E-03	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	1.94E-02	2.54E-02	6.36E-03	COMG 003
Volatile Organic Compounds (VOC) ^a	-	2.59E-01	3.40E-01	8.49E-02	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	7.70E-04	1.93E-04	COMG 003
Carbon Dioxide (CO ₂) ^b	-	1.10E+02	1.44E+02	3.60E+01	COMG 003
Methane (CH ₄) ^c	-	2.21E-03	2.89E-03	7.22E-04	COMG 003
Nitrous Oxide (N ₂ O) ^c	-	2.21E-04	2.89E-04	7.22E-05	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^d	-	NA	1.44E+02	3.61E+01	COMG 003

Notes:
^a Emission factors from 40 CFR 60, Subpart JJJJ, Table 1, Engines >130 HP: NO_x - 2.0 g/HP-hr, CO - 4.0 g/HP-hr, VOC - 1.0 g/HP-hr

^b Emission factors from AP-42 (10/24) Table 3.2-3

^c Emission factors from 40 CFR 98, Subpart C, Table C-2, CH₄ - 1.0E-03 kg/MMBtu, N₂O - 1.0E-04 kg/MMBtu

^d Global Warming Potential from 40 CFR 98, Subpart A, Table A-1, CH₄ - 28, N₂O - 298

Hazardous Air Pollutants	Emission Factor (lb/MMBtu)	Pollutant Emissions		
		lb/hr	TPY	limited tpy
1,1,2,2-Tetrachloroethane	2.53E-05	3.31E-05	8.29E-06	COMG 003
1,1,2-Trichloroethane	1.53E-05	2.00E-05	5.01E-06	COMG 003
1,3-Butadiene	6.63E-04	8.69E-04	2.17E-04	COMG 003
1,3-Dichloropropene	1.27E-05	1.66E-05	4.16E-06	COMG 003
Acetaldehyde	2.79E-03	3.65E-03	9.14E-04	COMG 003
Acrolein	2.63E-03	3.45E-03	8.61E-04	COMG 003
Benzene	1.58E-03	2.07E-03	5.17E-04	COMG 003
Carbon Tetrachloride	1.77E-05	2.32E-05	5.80E-06	COMG 003
Chlorobenzene	1.29E-05	1.69E-05	4.22E-06	COMG 003
Chloroform	1.37E-05	1.79E-05	4.49E-06	COMG 003
Ethylbenzene	2.48E-05	3.25E-05	8.12E-06	COMG 003
Ethylene Dibromide	2.13E-05	2.79E-05	6.98E-06	COMG 003
Formaldehyde	2.05E-02	2.69E-02	6.71E-03	COMG 003
Methylene Chloride	4.12E-05	5.40E-05	1.35E-05	COMG 003
Naphthalene	9.71E-05	1.27E-04	3.18E-05	COMG 003
POM	1.41E-04	1.85E-04	4.62E-05	COMG 003
Styrene	1.19E-05	1.56E-05	3.90E-06	COMG 003
Toluene	5.58E-04	7.31E-04	1.83E-04	COMG 003
Vinyl Chloride	7.18E-06	9.41E-06	2.35E-06	COMG 003
Xylene	1.95E-04	2.55E-04	6.39E-05	COMG 003

Notes:
^b Emission factors from AP-42 (10/24) Table 3.2-3

Project	McNeilus Truck and Manufacturing	
Subject	Potential Emission Calculations	
Task	EQUI 91 - Refuse Line Curing Oven (formerly EQUI 18) STRU 31: Refuse Line Curing Oven STRU 32: Refuse Line Curing Oven STRU 33: Refuse Line Curing Oven	

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	5.50	5,392.2	47.2

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.539	2.36	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.453	1.98	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.041	0.18	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.041	0.18	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.041	0.18	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.030	0.13	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.003	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	647	2834	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.012	0.05	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.012	0.05	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	651	2851	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	2.70E-06	1.18E-05	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	4.76E-07	2.08E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	1.13E-05	4.96E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	6.47E-06	2.83E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	4.04E-04	1.77E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	9.71E-03	4.25E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	3.29E-06	1.44E-05	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.83E-05	8.03E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	1.08E-06	4.72E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	6.47E-08	2.83E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	5.93E-06	2.60E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	7.55E-06	3.31E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	4.53E-07	1.98E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	2.05E-06	8.97E-06	COMG 003
Mercury ^a	7439-97-6	2.55E-07	1.40E-06	6.14E-06	COMG 003
Nickel ^a	7440-02-0	2.06E-06	1.13E-05	4.96E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	1.29E-07	5.67E-07	COMG 003
Total HAPs =			4.46E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)ant	1.80E-06
2.00E-04	Benzo(a)py	1.20E-06
1.20E-05	Benzo(b)flu	1.80E-06
1.10E-03	Benzo(g,h,	1.20E-06
1.40E-03	Benzo(k)flu	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,	1.20E-06
2.60E-04	Fluoranth	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2	1.80E-06
	Phenanth	1.70E-05
	Pyrene	5.00E-06

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task EQUI 92: Large Parts Curing Oven (formerly EQUI 21)
STRU 53: Large Parts Curing Oven
STRU 54: Large Parts Curing Oven

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	1.65	1,617.6	14.2

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.162	0.71	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.136	0.60	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.012	0.05	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.012	0.05	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.012	0.05	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.009	0.04	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.001	0.00	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	194	850	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.004	0.02	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.004	0.02	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	195	855	COMG 003

Small Boiler, uncontrolled

Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	8.09E-07	3.54E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	1.43E-07	6.25E-07	COMG 003
Benzene ^d	71-43-2	2.06E-06	3.40E-06	1.49E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	1.94E-06	8.50E-06	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	1.21E-04	5.31E-04	COMG 003
Hexane ^d	110-54-3	1.76E-03	2.91E-03	1.28E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	9.87E-07	4.32E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	5.50E-06	2.41E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	3.24E-07	1.42E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	1.94E-08	8.50E-08	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	1.78E-06	7.79E-06	COMG 003
Chromium ^e	7440-47-3	1.37E-06	2.26E-06	9.92E-06	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	1.36E-07	5.95E-07	COMG 003
Manganese ^e	7439-96-5	3.73E-07	6.15E-07	2.69E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	4.21E-07	1.84E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	3.40E-06	1.49E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	3.88E-08	1.70E-07	COMG 003
Total HAPs =			1.34E-02		

Confirm EF (lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶ scf)
8.82E-05	2-Methylnaph	2.40E-05
2.10E-03	3-Methylchlor	1.80E-06
1.20E-03	7, 12-Dimethy	1.60E-05
7.50E-02	Acenaphtheni	1.80E-06
1.80E+00	Acenaphthyle	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)anthra	1.80E-06
2.00E-04	Benzo(a)pyre	1.20E-06
1.20E-05	Benzo(b)fluor	1.80E-06
1.10E-03	Benzo(g,h,i)pe	1.20E-06
1.40E-03	Benzo(k)fluor	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h)an	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-cd)pyrene	1.80E-06
	Phenanathrene	1.70E-05
	Pyrene	5.00E-06
	Total	8.82E-05

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Project	McNeilus Truck and Manufacturing	
Subject	Potential Emission Calculations	
Task	EQUI 93 - Lines 3-5 Curing Oven STRU 17: Lines 3-5 Curing Oven	(formerly EQUI 29)

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	3.58	3,504.9	30.7

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.350	1.53	COMG 003
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.294	1.29	COMG 003
Particulate Matter (PM) ^b	-	7.45E-03	0.027	0.12	COMG 003
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.027	0.12	COMG 003
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.027	0.12	COMG 003
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.019	0.08	COMG 003
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.002	0.01	COMG 003
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	421	1842	COMG 003
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.008	0.03	COMG 003
Methane (CH ₄) ^b	74-82-8	2.26E-03	0.008	0.04	COMG 003
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	423	1853	COMG 003

Small Boiler, uncontrolled
Small Boiler, uncontrolled

Hazardous Air Pollutants	CAS#	Emission Factor	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	1.75E-06	7.68E-06	COMG 003
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.09E-07	1.35E-06	COMG 003
Benzene ^d	71-43-2	2.06E-06	7.36E-06	3.22E-05	COMG 003
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.21E-06	1.84E-05	COMG 003
Formaldehyde ^d	50-00-0	7.35E-05	2.63E-04	1.15E-03	COMG 003
Hexane ^d	110-54-3	1.76E-03	6.31E-03	2.76E-02	COMG 003
Naphthalene ^d	91-20-3	5.98E-07	2.14E-06	9.36E-06	COMG 003
Toluene ^d	108-88-3	3.33E-06	1.19E-05	5.22E-05	COMG 003
Arsenic ^e	7440-38-2	1.96E-07	7.01E-07	3.07E-06	COMG 003
Beryllium ^e	7440-41-7	1.18E-08	4.21E-08	1.84E-07	COMG 003
Cadmium ^e	7440-43-9	1.08E-06	3.86E-06	1.69E-05	COMG 003
Chromium ^e	7440-47-3	1.37E-06	4.91E-06	2.15E-05	COMG 003
Cobalt ^e	7440-48-4	8.24E-08	2.94E-07	1.29E-06	COMG 003
Manganese ^e	7439-96-5	3.73E-07	1.33E-06	5.83E-06	COMG 003
Mercury ^e	7439-97-6	2.55E-07	9.11E-07	3.99E-06	COMG 003
Nickel ^e	7440-02-0	2.06E-06	7.36E-06	3.22E-05	COMG 003
Selenium ^e	7782-49-2	2.35E-08	8.41E-08	3.68E-07	COMG 003
Total HAPs =			2.90E-02		

Confirm EF

(lb/10⁶ scf)

0.0005	POM	EF (lb/10 ⁶
8.82E-05	2-Methylna	2.40E-05
2.10E-03	3-Methylch	1.80E-06
1.20E-03	7, 12-Dime	1.60E-05
7.50E-02	Acenaphth	1.80E-06
1.80E+00	Acenaphth	1.80E-06
6.10E-04	Anthracene	2.40E-06
3.40E-03	Benz(a)ant	1.80E-06
2.00E-04	Benzo(a)py	1.20E-06
1.20E-05	Benzo(b)flu	1.80E-06
1.10E-03	Benzo(g,h,i)	1.20E-06
1.40E-03	Benzo(k)flu	1.80E-06
8.40E-05	Chrysene	1.80E-06
3.80E-04	Dibenzo(a,h)	1.20E-06
2.60E-04	Fluoranthene	3.00E-06
2.10E-03	Fluorene	2.80E-06
2.40E-05	Indeno(1,2,3-cd)py	1.80E-06
	Phenanthrene	1.70E-05
	Pyrene	5.00E-06

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

Total 8.82E-05

Computation

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Insignificant Welding Emissions

Worst Case Emission Factors

Electrode Type	PM	Mn	Cr	Cr (VI)	Ni	Co	Pb
	lb/10 ³ lb						
E6011	38.4	0.998	0.005	1.88	0.005	0.001	0.162
E70S	5.2	0.318	0.001	0.01	0.001	0.001	0.162
E308	10.8	0.346	0.524	0.01	0.184	0.001	0.162
E71T	12.2	0.662	0.002	0.14	0.004	0.001	0.162

Product	Type	Annual Usage lb/yr	PM		Mn		C
			lb/hr	ton/yr	lb/hr	ton/yr	
0079 SI BRZ	E6011	60	2.63E-04	1.15E-03	6.84E-06	2.99E-05	3.42E-08
7965-AF SA 86	E70S	5128	3.04E-03	1.33E-02	1.86E-04	8.15E-04	5.85E-07
7973-AE E70C-6M	E70S	46800	2.78E-02	1.22E-01	1.70E-03	7.44E-03	5.34E-06
8000-O SA 83	E70S	9050	5.37E-03	2.35E-02	3.29E-04	1.44E-03	1.03E-06
ER70S	E70S	811633	4.82E-01	2.11E+00	2.95E-02	1.29E-01	9.27E-05
ESA1206F92	E70S	22000	1.31E-02	5.72E-02	7.99E-04	3.50E-03	2.51E-06
L-50	E70S	81000	4.81E-02	2.11E-01	2.94E-03	1.29E-02	9.25E-06
L-56	E70S	14562	8.64E-03	3.79E-02	5.29E-04	2.32E-03	1.66E-06
L-59	E70S	82420	4.89E-02	2.14E-01	2.99E-03	1.31E-02	9.41E-06
LA-90	E70S	33	1.96E-05	8.58E-05	1.20E-06	5.25E-06	3.77E-09
LINEDM23346313	E70S	360	2.14E-04	9.36E-04	1.31E-05	5.72E-05	4.11E-08
MC-706	E70S	66	3.92E-05	1.72E-04	2.40E-06	1.05E-05	7.53E-09
MG 600	E6011	4	1.75E-05	7.68E-05	4.56E-07	2.00E-06	2.28E-09
RAD64001461	E70S	3	1.78E-06	7.80E-06	1.09E-07	4.77E-07	3.42E-10
RAD64001567	E70S	1	5.94E-07	2.60E-06	3.63E-08	1.59E-07	1.14E-10
RAD64001609	E71T	1	1.39E-06	6.10E-06	7.56E-08	3.31E-07	2.28E-10
SAN309LSI04533	E308	33	4.07E-05	1.78E-04	1.30E-06	5.71E-06	1.97E-06
STO11173800	E6011	180	7.89E-04	3.46E-03	2.05E-05	8.98E-05	1.03E-07
UltraCore 71C	E71T	2607	3.63E-03	1.59E-02	1.97E-04	8.63E-04	5.95E-07
US-W7	E70S	8000	4.75E-03	2.08E-02	2.90E-04	1.27E-03	9.13E-07
Total Welding Emissions			0.65	2.83	0.04	0.17	0.00

Note: (1) Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP
(2) If an emission factor was not available, the worst case emission factor from the
for the welding type were available, the worst case emission factor from all types was

Job No.	NA
Computed	KEG
Checked	GJR
Sheets	1

Emission Factor ton/yr	Cr(VI)		Ni		Co		Pb	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1.50E-07	1.29E-05	5.64E-05	3.42E-08	1.50E-07	6.85E-09	3.00E-08	1.11E-06	4.86E-06
2.56E-06	5.85E-06	2.56E-05	5.85E-07	2.56E-06	5.85E-07	2.56E-06	9.48E-05	4.15E-04
2.34E-05	5.34E-05	2.34E-04	5.34E-06	2.34E-05	5.34E-06	2.34E-05	8.65E-04	3.79E-03
4.53E-06	1.03E-05	4.53E-05	1.03E-06	4.53E-06	1.03E-06	4.53E-06	1.67E-04	7.33E-04
4.06E-04	9.27E-04	4.06E-03	9.27E-05	4.06E-04	9.27E-05	4.06E-04	1.50E-02	6.57E-02
1.10E-05	2.51E-05	1.10E-04	2.51E-06	1.10E-05	2.51E-06	1.10E-05	4.07E-04	1.78E-03
4.05E-05	9.25E-05	4.05E-04	9.25E-06	4.05E-05	9.25E-06	4.05E-05	1.50E-03	6.56E-03
7.28E-06	1.66E-05	7.28E-05	1.66E-06	7.28E-06	1.66E-06	7.28E-06	2.69E-04	1.18E-03
4.12E-05	9.41E-05	4.12E-04	9.41E-06	4.12E-05	9.41E-06	4.12E-05	1.52E-03	6.68E-03
1.65E-08	3.77E-08	1.65E-07	3.77E-09	1.65E-08	3.77E-09	1.65E-08	6.10E-07	2.67E-06
1.80E-07	4.11E-07	1.80E-06	4.11E-08	1.80E-07	4.11E-08	1.80E-07	6.66E-06	2.92E-05
3.30E-08	7.53E-08	3.30E-07	7.53E-09	3.30E-08	7.53E-09	3.30E-08	1.22E-06	5.35E-06
1.00E-08	8.58E-07	3.76E-06	2.28E-09	1.00E-08	2.28E-09	1.00E-08	7.40E-08	3.24E-07
1.50E-09	3.42E-09	1.50E-08	3.42E-10	1.50E-09	3.42E-10	1.50E-09	5.55E-08	2.43E-07
5.00E-10	1.14E-09	5.00E-09	1.14E-10	5.00E-10	1.14E-10	5.00E-10	1.85E-08	8.10E-08
1.00E-09	1.60E-08	7.00E-08	4.57E-10	2.00E-09	4.57E-10	2.00E-09	1.85E-08	8.10E-08
8.65E-06	3.77E-08	1.65E-07	6.93E-07	3.04E-06	6.93E-07	3.04E-06	6.10E-07	2.67E-06
4.50E-07	3.86E-05	1.69E-04	1.03E-07	4.50E-07	1.03E-07	4.50E-07	3.33E-06	1.46E-05
2.61E-06	4.17E-05	1.82E-04	1.19E-06	5.21E-06	1.19E-06	5.21E-06	4.82E-05	2.11E-04
4.00E-06	9.13E-06	4.00E-05	9.13E-07	4.00E-06	9.13E-07	4.00E-06	1.48E-04	6.48E-04
0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.09

McNeilus PTE Calculations, 5th Edition, Jan. 1995, Tables 12-19-1 and 12-19-2.

same welding process, but different electrode type was used. If no emission factors are used.

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Largest Individual Space Heater

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	MMH.R.7007.1300, subp.3(F) Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)	Maximum Heat Input MMBtu/hr
8,760	NA	1,020	0.83	808.8	7.1	4.32

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.081	0.35	0.35
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.068	0.30	0.30
Particulate Matter (PM) ^b	-	7.45E-03	0.006	0.03	0.03
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.006	0.03	0.03
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.006	0.03	0.03
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.004	0.02	0.02
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.000	0.00	0.00
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	97	425	425
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.002	0.01	0.01
Methane (CH ₄) ^b	74-82-8	2.25E-03	0.002	0.01	0.01
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	98	428	428

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	4.04E-07	1.77E-06	1.77E-06
Polycyclic Organic Matter (POM) ^d	NA	8.60E-08	7.10E-08	3.11E-07	3.11E-07
Benzene ^d	71-43-2	2.06E-06	1.70E-06	7.44E-06	7.44E-06
Dichlorobenzene ^d	25321-22-6	1.18E-06	9.70E-07	4.25E-06	4.25E-06
Formaldehyde ^d	50-00-0	7.35E-05	6.07E-05	2.66E-04	2.66E-04
Hexane ^d	110-54-3	1.77E-03	1.46E-03	6.38E-03	6.38E-03
Naphthalene ^d	91-20-3	5.98E-07	4.93E-07	2.16E-06	2.16E-06
Toluene ^d	108-88-3	3.33E-06	2.75E-06	1.20E-05	1.20E-05
Arsenic ^e	7440-38-2	1.96E-07	1.62E-07	7.08E-07	7.08E-07
Beryllium ^e	7440-41-7	1.20E-08	9.90E-09	4.34E-08	4.34E-08
Cadmium ^e	7440-43-9	1.08E-06	8.89E-07	3.90E-06	3.90E-06
Chromium ^e	7440-47-3	1.37E-06	1.13E-06	4.96E-06	4.96E-06
Cobalt ^e	7440-48-4	8.20E-08	6.77E-08	2.96E-07	2.96E-07
Manganese ^e	7439-96-5	3.73E-07	3.08E-07	1.35E-06	1.35E-06
Mercury ^e	7439-97-6	2.55E-07	2.10E-07	9.21E-07	9.21E-07
Nickel ^e	7440-02-0	2.06E-06	1.70E-06	7.44E-06	7.44E-06
Selenium ^e	7782-49-2	2.40E-08	1.98E-08	8.67E-08	8.67E-08
Total HAPs =			6.69E-03	6.69E-03	6.69E-03

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

(lb/10⁶ scf)

Nitrogen Oxides (NO _x) ^a	100 Small Boiler, uncontrolled
Carbon Monoxide (CO) ^a	84 Small Boiler, uncontrolled
Particulate Matter (PM) ^b	7.6
Particulate Matter < 10 Microns (PM ₁₀) ^b	7.6
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	7.6

Development of cut-off between Minn.R.7007.1300, subp.3(F) and Minn.R.7007.1300,subp.4

1) Using Maximum Heat Input; is this below the Minn.R.7007.1300, subp.3(F) thresholds?

Criteria Air Pollutants - Using Max Heat	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.424	1.86	1.86
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.356	1.56	1.56
Particulate Matter (PM) ^b	-	7.45E-03	0.032	0.14	0.14
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.032	0.14	0.14
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.032	0.14	0.14
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.023	0.10	0.10
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.003	0.01	0.01
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	508.235	2226	2226
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	0.04
Methane (CH ₄) ^b	74-82-8	2.25E-03	0.010	0.04	0.04
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	511.255	2239	2239

2) Minn.R.7007.1300, subp.3(F) thresholds are exceeded and CO₂e

Why not Minn.R.7007.1300, subp. 3(F)? Minn.R.7007.1300, subp.4?

lb/yr	Less than (lb/yr)	lb/hr	less than
3710.117647	2000	0.424	2.28
3116.498824	4000	0.356	5.7
281.9689412	2000	0.032	2.28
281.9689412	2000	0.032	2.28
204.0564706	2000	0.023	2.28
22.26070588	2000	0.003	2.28
tpy	less than (tpy)		
2239	1000		

Hazardous Air Pollutants - Using Max Heat	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	2.12E-06	9.28E-06	9.28E-06
Polycyclic Organic Matter (POM) ^d	NA	8.60E-08	3.72E-07	1.63E-06	1.63E-06
Benzene ^d	71-43-2	2.06E-06	8.89E-06	3.90E-05	3.90E-05
Dichlorobenzene ^d	25321-22-6	1.18E-06	5.08E-06	2.23E-05	2.23E-05
Formaldehyde ^d	50-00-0	7.35E-05	3.18E-04	1.39E-03	1.39E-03
Hexane ^d	110-54-3	1.77E-03	7.62E-03	3.34E-02	3.34E-02
Naphthalene ^d	91-20-3	5.98E-07	2.58E-06	1.13E-05	1.13E-05
Toluene ^d	108-88-3	3.33E-06	1.44E-05	6.31E-05	6.31E-05
Arsenic ^e	7440-38-2	1.96E-07	8.47E-07	3.71E-06	3.71E-06
Beryllium ^e	7440-41-7	1.20E-08	5.18E-08	2.27E-07	2.27E-07
Cadmium ^e	7440-43-9	1.08E-06	4.66E-06	2.04E-05	2.04E-05
Chromium ^e	7440-47-3	1.37E-06	5.93E-06	2.60E-05	2.60E-05
Cobalt ^e	7440-48-4	8.20E-08	3.54E-07	1.55E-06	1.55E-06
Manganese ^e	7439-96-5	3.73E-07	1.61E-06	7.06E-06	7.06E-06
Mercury ^e	7439-97-6	2.55E-07	1.10E-06	4.83E-06	4.83E-06
Nickel ^e	7440-02-0	2.06E-06	8.89E-06	3.90E-05	3.90E-05
Selenium ^e	7782-49-2	2.40E-08	1.04E-07	4.54E-07	4.54E-07
Total HAPs =			3.50E-02	3.50E-02	3.50E-02

Minn.R.7007.1300, subp.4

25% of threshold tpy	threshold tpy	under?
NA	NA	
2.50E-03	0.01	yes
5.00E-01	2	yes
7.50E-01	3	yes
5.00E-01	2	yes
2.50E+00	10	yes
2.50E+00	10	yes
2.50E+00	10	yes
1.25E-03	0.005	yes
2.00E-03	0.008	yes
2.50E-03	0.01	yes
1.25E+00	5	yes
2.50E-02	0.1	yes
2.00E-01	0.8	yes
2.50E-03	0.01	yes
2.50E-01	1	yes
2.50E-02	0.1	yes

not salts (

3) Because all of the space heaters have the same emission factors, and are individually identified by MMBtu/hr, convert EF into MMBtu/hr and use of the lowest to separate space heaters into those under and above the Minn.R.7007.1300, subp.3(F) threshold
 NO_x Cutoff (MMBtu/hr) CO₂e Cutoff (MMBtu/hr)
 2.33E+00 1.93E+00
 use CO₂e, 'cause that is the lowest

for NOx 4) Apply MMBtu/hr limit to all space heaters to determine when Minn.R.7007.1300,subp.3(F) applies

Number of Heating Units	Description	Individual Heat Input (MMBtu/hr)	Total Heat Input (MMBtu/hr)	Minn.R.7007.1300, subp. 3(F)
(lb/hr)	North Paint Building		0	
	11 IR heater	0.09	0.99	Applies
	Former NCI Building		0	
	28 IR heater	0.09	2.52	Applies
	1 IR heater	0.12	0.12	Applies
	1 heater	4	4	Doesn't Apply
	2 IR heater	0.06	0.12	Applies
	R&D Building		0	
	10 IR heater	0.09	0.9	Applies
	1 heater	2.7	2.7	Doesn't Apply
	2 heater	0.125	0.25	Applies
5	Plants Building		0	
	IR heater 0.09		0.45	Applies
	4 IR heater	0.12	0.48	Applies
	1 IR heater	0.06	0.06	Applies
	1 IR heater	0.096	0.096	Applies
	T&E Building		0	
	17 IR heater	0.09	1.53	Applies
	3 IR heater	0.06	0.18	Applies
	5 IR heater	0.07	0.35	Applies
	32 IR heater	0.12	3.84	Applies
	Main Office		0	
	2 heater	0.08	0.16	Applies
	4 heater	0.1	0.4	Applies
	1 heater	0.096	0.096	Applies
	1 heater	0.216	0.216	Applies
salts (0.0	1 heater	0.07	0.07	Applies
	1 heater	0.12	0.12	Applies
	1 heater	0.16	0.16	Applies
	Scale Building		0	
	6 IR heater	0.09	0.54	Applies
	Warming Shed		0	
	12 IR heater	0.09	1.08	Applies
	1 space heater	0.4	0.4	Applies
	Paint and Solvent Storage Area		0	
	1 heater	0.825	0.825	Applies
	Manufacturing Building		0	
	8 heater	4.32	34.56	Doesn't Apply
	35 IR heater	0.06	2.1	Applies
	66 IR heater	0.09	5.94	Applies
	7 IR heater	0.12	0.84	Applies
	8 IR heater	0.15	1.2	Applies
	1 IR heater	0.09	0.09	Applies
	1 IR heater	0.2	0.2	Applies
(i.e. limiting factor)	Total		26.323	
	Total Space Heaters Subject to Minn.R.7007.1300, subp.3(F):			##
	Max Size:	0.825 MMBtu/hr		

Volatile Organic Compounds (VOC)b	5.5
Sulfur Dioxide (SO2)b	0.6
Carbon Dioxide (CO2)b	120000
Nitrous Oxide (N2O)b	2.2
Methane (CH4)b	2.3
Lead ^b	0.0005
Polycyclic Organic Matter (POM) ^d	0.0000882
Benzene ^d	0.0021
Dichlorobenzene ^d	0.0012
Formaldehyde ^d	0.075
Hexane ^d	1.8
Naphthalene ^d	0.00061
Toluene ^d	0.0034
Arsenic ^e	0.0002
Beryllium ^e	0.000012
Cadmium ^e	0.0011
Chromium ^e	0.0014
Cobalt ^e	0.000084
Manganese ^e	0.00038
Mercury ^e	0.00026
Nickel ^e	0.0021
Selenium ^e	0.000024

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task Total Facility Space Heaters

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	29.84	29,254.9	256.3

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	2.925	12.81	12.81
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	2.457	10.76	10.76
Particulate Matter (PM) ^b	-	7.45E-03	0.222	0.97	0.97
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.222	0.97	0.97
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.222	0.97	0.97
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.161	0.70	0.70
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.018	0.08	0.08
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	3511	15376	15376
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.064	0.28	0.28
Methane (CH ₄) ^b	74-82-8	2.25E-03	0.067	0.29	0.29
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	3531	15468	15468

Hazardous Air Pollutants	CAS#	Emission Factor	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	1.46E-05	6.41E-05	6.41E-05
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	2.58E-06	1.13E-05	1.13E-05
Benzene ^d	71-43-2	2.06E-06	6.14E-05	2.69E-04	2.69E-04
Dichlorobenzene ^d	25321-22-6	1.18E-06	3.51E-05	1.54E-04	1.54E-04
Formaldehyde ^d	50-00-0	7.35E-05	2.19E-03	9.61E-03	9.61E-03
Hexane ^d	110-54-3	1.76E-03	5.27E-02	2.31E-01	2.31E-01
Naphthalene ^d	91-20-3	5.98E-07	1.78E-05	7.82E-05	7.82E-05
Toluene ^d	108-88-3	3.33E-06	9.95E-05	4.36E-04	4.36E-04
Arsenic ^e	7440-38-2	1.96E-07	5.85E-06	2.56E-05	2.56E-05
Beryllium ^e	7440-41-7	1.18E-08	3.51E-07	1.54E-06	1.54E-06
Cadmium ^e	7440-43-9	1.08E-06	3.22E-05	1.41E-04	1.41E-04
Chromium ^e	7440-47-3	1.37E-06	4.10E-05	1.79E-04	1.79E-04
Cobalt ^e	7440-48-4	8.24E-08	2.46E-06	1.08E-05	1.08E-05
Manganese ^e	7439-96-5	3.73E-07	1.11E-05	4.87E-05	4.87E-05
Mercury ^e	7439-97-6	2.55E-07	7.61E-06	3.33E-05	3.33E-05
Nickel ^e	7440-02-0	2.06E-06	6.14E-05	2.69E-04	2.69E-04
Selenium ^e	7782-49-2	2.35E-08	7.02E-07	3.08E-06	3.08E-06
Total HAPs =			2.42E-01	2.42E-01	2.42E-01

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

	(lb/10 ⁶ scf)		
Nitrogen Oxides (NO _x) ^a	100	Small Boiler, uncontrolled	
Carbon Monoxide (CO) ^a	84	Small Boiler, uncontrolled	
Particulate Matter (PM) ^b	7.6		
Particulate Matter < 10 Microns (PM ₁₀) ^b	7.6	POM	EF (lb/10 ⁶ scf)
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	7.6	2-Methylnaphthalene	2.40E-05
Volatile Organic Compounds (VOC) ^b	5.5	3-Methylchloranthrene	1.80E-06
Sulfur Dioxide (SO ₂) ^b	0.6	7, 12-Dimethylbenzofuran	1.60E-05
Carbon Dioxide (CO ₂) ^b	120000	Acenaphthene	1.80E-06
Nitrous Oxide (N ₂ O) ^b	2.2	Acenaphthylene	1.80E-06
Methane (CH ₄) ^b	2.3	Anthracene	2.40E-06
Lead ^b	0.0005	Benz(a)anthracene	1.80E-06
Polycyclic Organic Matter (POM) ^d	0.0000882	Benzo(a)pyrene	1.20E-06
Benzene ^d	0.0021	Benzo(b)fluoranthene	1.80E-06
Dichlorobenzene ^d	0.0012	Benzo(g,h,i)perylene	1.20E-06
Formaldehyde ^d	0.075	Benzo(k)fluoranthene	1.80E-06
Hexane ^d	1.8	Chrysene	1.80E-06
Naphthalene ^d	0.00061	Dibenzo(a,h)anthracene	1.20E-06
Toluene ^d	0.0034	Fluoranthene	3.00E-06
Arsenic ^e	0.0002	Fluorene	2.80E-06
Beryllium ^e	0.000012	Indeno(1,2,3-cd)pyrene	1.80E-06
Cadmium ^e	0.0011	Phenanthrene	1.70E-05
Chromium ^e	0.0014	Pyrene	5.00E-06
Cobalt ^e	0.000084		
Manganese ^e	0.00038	Total	8.82E-05
Mercury ^e	0.00026		
Nickel ^e	0.0021		
Selenium ^e	0.000024		

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Largest Individual Space Heater

Computed	GJR
Checked	KEG
Sheets	1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	MMBtu/hr 1300, subp.3(F) Maximum Heat Input	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	4.32	4,235.3	37.1

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	0.424	1.86	1.86
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	0.356	1.56	1.56
Particulate Matter (PM) ^b	-	7.45E-03	0.032	0.14	0.14
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.032	0.14	0.14
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.032	0.14	0.14
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.023	0.10	0.10
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.003	0.01	0.01
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	508	2226	2226
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.009	0.04	0.04
Methane (CH ₄) ^b	74-82-8	2.25E-03	0.010	0.04	0.04
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	511	2239	2239

Hazardous Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:					
Lead ^b	NA	4.90E-07	2.12E-06	9.28E-06	9.28E-06
Polycyclic Organic Matter (POM) ^d	NA	8.60E-08	3.72E-07	1.63E-06	1.63E-06
Benzene ^d	71-43-2	2.06E-06	8.89E-06	3.90E-05	3.90E-05
Dichlorobenzene ^d	25321-22-6	1.18E-06	5.08E-06	2.23E-05	2.23E-05
Formaldehyde ^d	50-00-0	7.35E-05	3.18E-04	1.39E-03	1.39E-03
Hexane ^d	110-54-3	1.77E-03	7.62E-03	3.34E-02	3.34E-02
Naphthalene ^d	91-20-3	5.98E-07	2.58E-06	1.13E-05	1.13E-05
Toluene ^d	108-88-3	3.33E-06	1.44E-05	6.31E-05	6.31E-05
Arsenic ^e	7440-38-2	1.96E-07	8.47E-07	3.71E-06	3.71E-06
Beryllium ^e	7440-41-7	1.20E-08	5.18E-08	2.27E-07	2.27E-07
Cadmium ^e	7440-43-9	1.08E-06	4.66E-06	2.04E-05	2.04E-05
Chromium ^e	7440-47-3	1.37E-06	5.93E-06	2.60E-05	2.60E-05
Cobalt ^e	7440-48-4	8.20E-08	3.54E-07	1.55E-06	1.55E-06
Manganese ^e	7439-96-5	3.73E-07	1.61E-06	7.06E-06	7.06E-06
Mercury ^e	7439-97-6	2.55E-07	1.10E-06	4.83E-06	4.83E-06
Nickel ^e	7440-02-0	2.06E-06	8.89E-06	3.90E-05	3.90E-05
Selenium ^e	7782-49-2	2.40E-08	1.04E-07	4.54E-07	4.54E-07
Total HAPs =				3.50E-02	3.50E-02

CO2e Cutoff (MMBtu/hr)
1.93E+00

Number of Heating Units	Description	Individual Heat Input (MMBtu/hr)	Total Heat Input (MMBtu/hr)	Minn.R.7007.1300, subp. 3(F)
	North Paint Building		0	
	11 IR heater	0.09	0.99	Applies
	Former NCI Building		0	
	28 IR heater	0.09	2.52	Applies
	1 IR heater	0.12	0.12	Applies
	1 heater	4	4	Doesn't Apply
	2 IR heater	0.06	0.12	Applies
	R&D Building		0	
	10 IR heater	0.09	0.9	Applies
	1 heater	2.7	2.7	Doesn't Apply
	2 heater	0.125	0.25	Applies
	Plants Building		0	
	IR heater	0.09	0.45	Applies
	4 IR heater	0.12	0.48	Applies
	1 IR heater	0.06	0.06	Applies
	1 IR heater	0.096	0.096	Applies
	T&E Building		0	
	17 IR heater	0.09	1.53	Applies
	3 IR heater	0.06	0.18	Applies
	5 IR heater	0.07	0.35	Applies
	32 IR heater	0.12	3.84	Applies
	Main Office		0	
	2 heater	0.08	0.16	Applies
	4 heater	0.1	0.4	Applies
	1 heater	0.096	0.096	Applies
	1 heater	0.216	0.216	Applies
	1 heater	0.07	0.07	Applies
	1 heater	0.12	0.12	Applies
	1 heater	0.16	0.16	Applies
	Scale Building		0	
	6 IR heater	0.09	0.54	Applies
	Warming Shed		0	
	12 IR heater	0.09	1.08	Applies
	1 space heater	0.4	0.4	Applies
	Paint and Solvent Storage Area		0	

Notes:^a Emission factors from AP-42 (07/98), Table 1.4-1^b Emission factors from AP-42 (07/98), Table 1.4-2^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.^d Emission factors from AP-42 (07/98), Table 1.4-3^e Emission factors from AP-42 (07/98), Table 1.4-4

	(lb/10 ⁶ scf)	
Nitrogen Oxides (NO _x) ^a		100 Small Boiler, uncontrolled
Carbon Monoxide (CO) ^a		84 Small Boiler, uncontrolled
Particulate Matter (PM) ^b	7.6	
Particulate Matter < 10 Microns (PM ₁₀) ^b	7.6	
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	7.6	
Volatile Organic Compounds (VOC) ^b	5.5	
Sulfur Dioxide (SO ₂) ^b	0.6	
Carbon Dioxide (CO ₂) ^b	120000	
Nitrous Oxide (N ₂ O) ^b	2.2	
Methane (CH ₄) ^b	2.3	
Lead ^b	0.0005	
Polycyclic Organic Matter (POM) ^d	0.0000882	
Benzene ^d	0.0021	
Dichlorobenzene ^d	0.0012	
Formaldehyde ^d	0.075	
Hexane ^d	1.8	
Naphthalene ^d	0.00061	
Toluene ^d	0.0034	
Arsenic ^e	0.0002	
Beryllium ^e	0.000012	
Cadmium ^e	0.0011	
Chromium ^e	0.0014	
Cobalt ^e	0.000084	
Manganese ^e	0.00038	
Mercury ^e	0.00026	
Nickel ^e	0.0021	
Selenium ^e	0.000024	

1 heater	0.825	0.825	Applies
Manufacturing Building		0	
8 heater	4.32	34.56	Doesn't Apply
35 IR heater	0.06	2.1	Applies
66 IR heater	0.09	5.94	Applies
7 IR heater	0.12	0.84	Applies
8 IR heater	0.15	1.2	Applies
1 IR heater	0.09	0.09	Applies
1 IR heater	0.2	0.2	Applies
Total		41.26	
Total Space Heaters Subject to Minn.R.7007.1300, subp.4:			10

Project McNeilus Truck and Manufacturing

Computed GJR

Subject Potential Emission Calculations

Checked KEG

Task Total Facility Space Heaters

Sheets 1

Hours	Net Power Output (MW)	Min. Heating Content (Btu/scf)	Maximum Heat Input MMBtu/hr	Maximum Fuel Input (scf/hr)	Fuel Use (MMscf/yr)
8,760	NA	1,020	41.26	40,451.0	354.4

Criteria Air Pollutants	CAS#	Emission Factor (lb/MMBtu)	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Nitrogen Oxides (NO _x) ^a	10102-43-9	9.80E-02	4.045	17.72	17.72
Carbon Monoxide (CO) ^a	630-08-0	8.24E-02	3.398	14.88	14.88
Particulate Matter (PM) ^b	-	7.45E-03	0.307	1.35	1.35
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	7.45E-03	0.307	1.35	1.35
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	7.45E-03	0.307	1.35	1.35
Volatile Organic Compounds (VOC) ^b	-	5.39E-03	0.222	0.97	0.97
Sulfur Dioxide (SO ₂) ^b	7446-09-5	5.88E-04	0.024	0.11	0.11
Carbon Dioxide (CO ₂) ^b	124-38-9	1.18E+02	4854	21261	21261
Nitrous Oxide (N ₂ O) ^b	10024-97-2	2.16E-03	0.089	0.39	0.39
Methane (CH ₄) ^b	74-82-8	2.25E-03	0.093	0.41	0.41
Carbon Dioxide Equivalent (CO ₂ e) ^c	-	1.18E+02	4883	21387	21387

Hazardous Air Pollutants	CAS#	Emission Factor	Potential Emissions		
			Hourly (lb/hr)	Unrestricted (tpy)	Limited (tpy)
Organic Compounds:		(lb/MMBtu)			
Lead ^b	NA	4.90E-07	2.02E-05	8.86E-05	8.86E-05
Polycyclic Organic Matter (POM) ^d	NA	8.65E-08	3.57E-06	1.56E-05	1.56E-05
Benzene ^d	71-43-2	2.06E-06	8.49E-05	3.72E-04	3.72E-04
Dichlorobenzene ^d	25321-22-6	1.18E-06	4.85E-05	2.13E-04	2.13E-04
Formaldehyde ^d	50-00-0	7.35E-05	3.03E-03	1.33E-02	1.33E-02
Hexane ^d	110-54-3	1.76E-03	7.28E-02	3.19E-01	3.19E-01
Naphthalene ^d	91-20-3	5.98E-07	2.47E-05	1.08E-04	1.08E-04
Toluene ^d	108-88-3	3.33E-06	1.38E-04	6.02E-04	6.02E-04
Arsenic ^e	7440-38-2	1.96E-07	8.09E-06	3.54E-05	3.54E-05
Beryllium ^e	7440-41-7	1.18E-08	4.85E-07	2.13E-06	2.13E-06
Cadmium ^e	7440-43-9	1.08E-06	4.45E-05	1.95E-04	1.95E-04
Chromium ^e	7440-47-3	1.37E-06	5.66E-05	2.48E-04	2.48E-04
Cobalt ^e	7440-48-4	8.24E-08	3.40E-06	1.49E-05	1.49E-05
Manganese ^e	7439-96-5	3.73E-07	1.54E-05	6.73E-05	6.73E-05
Mercury ^e	7439-97-6	2.55E-07	1.05E-05	4.61E-05	4.61E-05
Nickel ^e	7440-02-0	2.06E-06	8.49E-05	3.72E-04	3.72E-04
Selenium ^e	7782-49-2	2.35E-08	9.71E-07	4.25E-06	4.25E-06
Total HAPs =			3.35E-01	3.35E-01	3.35E-01

Notes:

^a Emission factors from AP-42 (07/98), Table 1.4-1

^b Emission factors from AP-42 (07/98), Table 1.4-2

^c Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potentials: CH₄ - 25, N₂O - 298.

^d Emission factors from AP-42 (07/98), Table 1.4-3

^e Emission factors from AP-42 (07/98), Table 1.4-4

	(lb/10 ⁶ scf)		
Nitrogen Oxides (NO _x) ^a	100	Small Boiler, uncontrolled	
Carbon Monoxide (CO) ^a	84	Small Boiler, uncontrolled	
Particulate Matter (PM) ^b	7.6		
Particulate Matter < 10 Microns (PM ₁₀) ^b	7.6	POM	EF (lb/10 ⁶ scf)
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	7.6	2-Methylnaphthalene	2.40E-05
Volatile Organic Compounds (VOC) ^b	5.5	3-Methylchloranthrene	1.80E-06
Sulfur Dioxide (SO ₂) ^b	0.6	7, 12-Dimethylbenzofuran	1.60E-05
Carbon Dioxide (CO ₂) ^b	120000	Acenaphthene	1.80E-06
Nitrous Oxide (N ₂ O) ^b	2.2	Acenaphthylene	1.80E-06
Methane (CH ₄) ^b	2.3	Anthracene	2.40E-06
Lead ^b	0.0005	Benz(a)anthracene	1.80E-06
Polycyclic Organic Matter (POM) ^d	0.0000882	Benzo(a)pyrene	1.20E-06
Benzene ^d	0.0021	Benzo(b)fluoranthene	1.80E-06
Dichlorobenzene ^d	0.0012	Benzo(g,h,i)perylene	1.20E-06
Formaldehyde ^d	0.075	Benzo(k)fluoranthene	1.80E-06
Hexane ^d	1.8	Chrysene	1.80E-06
Naphthalene ^d	0.00061	Dibenzo(a,h)anthracene	1.20E-06
Toluene ^d	0.0034	Fluoranthene	3.00E-06
Arsenic ^e	0.0002	Fluorene	2.80E-06
Beryllium ^e	0.000012	Indeno(1,2,3-cd)pyrene	1.80E-06
Cadmium ^e	0.0011	Phenanthrene	1.70E-05
Chromium ^e	0.0014	Pyrene	5.00E-06
Cobalt ^e	0.000084		
Manganese ^e	0.00038	Total	8.82E-05
Mercury ^e	0.00026		
Nickel ^e	0.0021		
Selenium ^e	0.000024		

Computation

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Paint Kitchen Color Test Hood (3 each)

Job No.	NA
Computed	GJR
Checked	KEG
Sheets	1

Color Test Hood				
Colors (#/day)	Amount (oz)	Amount (gal/hr)	VOC Content (lb/gal)	HAP Content (lb/gal)
20	3	0.0195	7.23	4.08

Criteria Air Pollutants	CAS#	Emission Factor (lb/gal)	Pollutant Emissions	
			lb/hr	TPY
Volatile Organic Compounds (VOC) ^a	-	7.23E+00	0.14	0.619
HAP	-	4.08E+00	0.08	0.349

Fit definition of
Minn. R. 7007.1300, subp.3(F) ?
(lb/yr) (lb/yr)
1,237.01 2000
698.36 2000

Notes:

- ^a Max material content based on available products.
^b Max HAP content based on all paints used at facility spray paint booths.

Product Description	Fomaldehy	Methanol	C Cumeme	C Ethylbenze	Methyl Isot	Toluene C	Hexamethy	Xylene CA	Glycol Eth	Max HAP	C
	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	(lb/gal)	
Autocoat LV360Primer EP Grey	0	0	0	0.01293	0.09051	0	0	0.03879	0.58185	0.72408	
Autocoat LV CIP Epoxy Primer White	0	0	0	0.01433	0.10031	0	0	0.05732	0.51588	0.68784	
Autocoat LV Cip Epoxy Primer Hardener	0.00769	0.01538	0	0.03845	0	0	0	0.17687	2.99141	3.2298	
Autocryl LV EP Cip Hardener	0.00769	0.01538	0	0.03845	0	0	0	0.17687	2.99141	3.2298	
Autocoat BT LV650 Hardener	0	0	0	0	0	0	0.0182	0	0	0.0182	
Autocryl LV EP Chassis Black	0	0	0	0.02548	0.34398	0	0	0.1274	0.85358	1.35044	
Autocryl LV EP Chassis Black	0	0	0	0.02548	0.34398	0	0	0.1274	0.85358	1.35044	
Autocoat BT B616 Mixing Black	0	0	0.0172	0	0	0	0	0	0	0.0172	
Autocoat BT B622 Brilliant Red Orange	0	0	0.01762	0	0	0	0	0	0	0.01762	
Autocoat BT B625 Brilliant Red	0	0	0.01796	0	0	0	0	0	0.03592	0.05388	
Autocoat BT B642 Bright Yellow Oxide	0	0	0.02096	0	0	0	0	0	0	0.02096	
Autocoat BT B641 Orange Yellow	0	0	0.00966	0	0	0	0	0	0	0.00966	
Autocoat BT B662 Bright Blue Transparent	0	0	0.0176	0	0	0	0	0	0	0.0176	
Autocoat BT B671 Violet Blue Transparent	0	0	0.01714	0	0	0	0	0	0	0.01714	
Autocoat BT B648 Light Yellow	0	0	0.01874	0	0	0	0	0.00937	0	0.02811	
Autocoat BT LV 650 Topcoat Solid Converter B603	0	0	0.02445	0	0	0	0	0.00815	0	0.0326	
Autocoat BT LV 650 Topcoat White Converter B604	0	0	0.02433	0	0	0	0	0.00811	0	0.03244	
Autocoat BT LV 650 Topcoat Metallic Converter B602	0	0	0.01632	0.00816	0	0	0	0.03264	0	0.05712	
Autocoat LV 650 TC RM FLNA10785	0	0	0.01078	0	0	0	0	0.01078	0	0.02156	
Autocoat LV 650 TC RM FLNA4002	0	0	0.01248	0	0	0	0	0	0	0.01248	
Autocoat LV 650 TC RM FLNA40073	0	0	0.0361	0	0	0	0	0.00722	1.5162	1.55952	
Autocoat BT LV650 TC RM FLNA50661	0	0	0	0	0	0	0	0	0	0	
Autocoat BT LV 650 Topcoat RM FLNA50661	0	0	0.019	0	0	0	0	0.0095	0	0.0285	
Autocoat LV 650 TC RM FLNA6601	0	0	0.027	0	0	0	0	0.009	0	0.036	
Autocoat BT LV650 TC RM NAV9219	0	0	0	0	0	0	0	0	0	0	
Autocoat BT Toner B610	0	0	0.015	0	0	0	0	0	0	0.015	
Autocoat LV 650TC RM FLNA5230	0	0	0.018	0	0	0	0	0	0	0.018	
Autocoat LV 650 TC RM Matte Black	0	0	0.01021	0.04084	0	0.01021	0	0.18378	0.02042	0.26546	
Autocoat BT LV650 Topcoat RM FLNA40499	0	0	0.01185	0	0	0	0	0	0	0.01185	
Autocoat BT LV 650 TC RM FLNA40309	0	0	0.01211	0	0	0	0	0	0	0.01211	
Autocoat BT Toner B627	0	0	0.0179	0	0	0	0	0	0	0.0179	
Autocoat BT Toner B632	0	0	0.01862	0	0	0	0	0	0	0.01862	
Autocoat BT Toner B649	0	0	0	0	0	0	0	0.01214	0	0.01214	
Autocoat BT Toner B653	0	0	0.03528	0	0	0	0	0.00882	0	0.0441	
Autocoat BT Toner B664	0	0	0.03524	0	0	0	0	0.00881	0	0.04405	
Autocoat LV Cip Epoxy Primer Hardener	0.00769	0.01538	0	0.03845	0	0	0	0.17687	2.99141	3.2298	
Autocryl LV EP Cip Hardener	0.00769	0.01538	0	0.03845	0	0	0	0.17687	2.99141	3.2298	
Autocoat BT LV650 Hardener	0	0	0	0	0	0	0.0182	0	0	0.0182	
Exempt Reducer	0	0	0	0	0	0	0	0	0	0	
AT105 Bus Reducer SRA	0.00E+00	0.00E+00	5.08E-02	2.83E-01	2.54E+00	7.25E-03	0.00E+00	1.20E+00	0.00E+00	4.08175	
Autocoat BT LV 650 Reducer Slow	0	0	0	0	0	0	0	0	0	0	
Autocoat BT LV 650 Reducer Medium	0	0	0	0	0	0	0	0	0	0	
Autocoat LV 650 TC Reducer Accelerator	0	0	0	0	0	0	0	0	0	0	

Max HAP Content (lb/gal) : 4.08175

Computation

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Blast Booth Operation No. 2 (Drum and Packer Booths)

Shot Blasting		
Hours	Shot ^a (lbs)	Shot (lb/hr)
8,760	263,560	30

Criteria Air Pollutants	CAS#	Emission Factor (lb/1000 lbs)	Pollutant Emissions	
			lb/hr	TPY
Particulate Matter (PM) ^b	-	0.69	0.02	0.09
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	0.69	0.02	0.09
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	0.69	0.02	0.09

Notes:

^a Amount of shot based on 2015 usage x 110%

^b Emission factors from AP-42 (9/97), Table 13.2.6-1. PM/PM₁₀/PM_{2.5} assumed equivalent.

^c Insignificant activity per Minn. R. 7007.1300, Subpart 3(F)

PM and PM₁₀ needs to be below 2000 pounds/year. (0.09 tpy x 2000lb/ton = 182 lb/year)

Minn. R. 7011.0715 limit comparison

Limit (lb/hr): 0.27

Computation

Project	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Plasma and Laser Cutting Operations

Shot Blasting		
Hours	Steel ^a (lbs)	Cut Amount ^b (lbs)
8,760	55,775,789	278879

Criteria Air Pollutants	CAS#	Emission Factor ^c (%)	Total Emissions		Emissions per Unit (5 plasma/laser cutter machines)	
			Pollutant Emissions		Pollutant Emissions	
			lb/hr	TPY	lb/hr	TPY
Particulate Matter (PM) ^b	-	5	0.65	2.86	0.13	0.57
Particulate Matter < 10 Microns (PM ₁₀) ^b	-	5	0.65	2.86	0.13	0.57
Particulate Matter < 2.5 Microns (PM _{2.5}) ^b	-	5	0.65	2.86	0.13	0.57
Criteria Air Pollutants	CAS#	Emission Factor ^d (lb/hr)	Pollutant Emissions		Pollutant Emissions	
			lb/hr	TPY	lb/hr	TPY
Nitrogen Dioxide ^d		0.074	0.074	0.325	0.015	0.065

Notes:

^a Amount of steel based on 2015 usage x 110%

^b Amount of material removed by cutting is 0.5%

^c Emissions of Fume in Plasma Cutting AP-42, Chapter 12, Related Emission Factor Documentation.

5% of material removed by cutting. Emissions of PM/PM₁₀/PM_{2.5} assumed equivalent to fume.

^d Emissions of Fume in Plasma Cutting AP-42, Chapter 12, Related Emission Factor Documentation.

Like the PM emission factors, assume material = mild steel; thickness = 8 mm

^e Dry = 5.5 L/min NOx emissions

at IUPAC (International Union of Pure Applied Chemistry) STD (0 degrees C and 100 kPa) dry air has a density of 1.2754 kg/m³

8% of NOx emissions = NO₂

5.5 L/min

0.08 percent of NOx that is NO₂

1.2754 kg/m³

60 min/hr

0.001 m³/L

2.20462 lb/kg

8760 hrs/yr

2000 lbs/ton

^f Insignificant activity per Minn. R. 7007.1300, Subpart 3(F)

PM and PM₁₀ needs to be below 2000 pounds/year. (0.57 tpy x 2000lb/ton = 1143 lb/year)

CO₂e needs to be below 1,000 tpy. (0.065 tpy NO₂ x 298 GWP = 19.3 tpy CO₂e)

Cutters are insignificant activities under subpart 3(F) on an individual basis.

Minn. R. 7011.0715 limit comparison

Limit (lb/hr): 0.28

Facility	McNeilus Truck and Manufacturing
Subject	Potential Emission Calculations
Task	Vehicle CNG Venting

Max Vehicle CNG Tank Size (Diesel Gallon Equivalents)	Conversion Factor (DGE to GGE)*	Conversion Factor (GGE to ccf of CNG)*	Density of Methane** (lb/ft^3)	Conversion Factor (tons to pounds)	Methane GWP***	Rate (tanks / week)	Conversion Factor (weeks to years)
105	1.155	0.877	0.0416	0.0005	- 25	1	52

Criteria Air Pollutants	CAS#	Volume	Mass		Emissions
		(hundred cubic feet)	(pounds / tank)	(tons / tank)	(tons / year)
Methane (CH ₄)	74-82-8	1.38E+02	575.261	0.29	-
Carbon Dioxide Equivalent (CO ₂ e)	-	-	-	7	374

* "Fuel Conversion Factors to Gasoline Gallon Equivalents," <https://epact.energy.gov/fuel-conversion-factors>

** At 70 degrees Fahrenheit and 1 atm

*** Based on 40 CFR 98, Subpart A, Table A-1, Global Warming Potential: CH₄ - 25

McNeilus Truck and Manufacturing Inc.
Permit Action No. 03900014-102
Technical Support Document

Attachment 2
Subject Item Inventory and Facility Requirements

Attachment 2 – Subject item inventory and facility requirements

SI List

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	
Activity	Insignificant Air Emissions Activity	ACTV 3	Null	All IAs	
Agency Interest	Conventional Site	AI SI 434	Null	Null	
Component Group	Air Component Group	COMG 1	GP004	Coating Application	
		COMG 2	GP003	New Indirect Heating Equipment as defined by Minn. R. 7011.0515, subp. 3	
		COMG 3	GP001	Coating, Curing and Clean-up Operations	
		COMG 4	GP002	Panel Filters	
		COMG 7	Null	Coating Operations as defined by 40 CFR pt.63 subp. Mmmm	
		COMG 8	GP003	Existing Indirect Heating Equipment as defined by Minn. R. 7011.0510, subp. 3	
		COMG 9	Null	Emergency Generators	
		EQUI 11	EU024	Plant-wide Clean Up Solvent Usage	
		EQUI 58	EU032	High Flow Line Oven	
Equipment	Dryer/Oven, indirect fired	EQUI 59	EU033	Line 6 Curing Oven (MUA 85)	
		EQUI 71	Null	Burn Off Oven	
		EQUI 77	Null	Monorail Curing Oven	
		EQUI 86	Null	Side Loader Curing Oven	
		EQUI 91	EU018	Refuse Line Curing Oven	
		EQUI 92	EU021	Large Parts Curing Oven	
		EQUI 93	EU010	Lines 3-5 Curing Oven	
		EQUI 74	Null	Monorail Topcoat Booth Air Make-up (MAU 97)	
	Furnace	EQUI 76	Null	Monorail Prime Booth Air Make-up (MUA 94)	
		EQUI 81	Null	Side Loader Paint Booth Air Make-Up (MAU 64)	
		EQUI 83	Null	Side Loader Prime Booth Air Make-up	
		EQUI 85	Null	Side Loader Clear Coat Booth Air Make-Up	
		EQUI 88	Null	Various Power Wash Heaters	
	Other Combustion	EQUI 32	Null	Large Parts Prime & Paint Air Make-up	
		EQUI 33	Null	Refuse Line Prime Booth Air Make-up	
		EQUI 36	Null	High Flow Line Air Make-Up	
		EQUI 38	Null	Line 3 Paint Booth Air Make-up	
		EQUI 39	Null	Line 3 Touch-up Booth Air Make-up	
		EQUI 41	Null	Line 4 Paint Booth Air Make-up	
		EQUI 42	Null	Line 4 Touch-up Booth Air Make-up	
		EQUI 44	Null	Line 5 Paint Booth Air Make-up	
		EQUI 45	Null	Line 5 Touch-up Booth Air Make-up	
		EQUI 46	Null	Line 6 Paint & Touch-up Booth Air Make-up	
		EQUI 62	Null	Various Small Capacity Heaters	
	Other Emission Unit	EQUI 87	Null	Blast Booth Monorail	
	Reciprocating IC Engine	EQUI 72	Null	MFG Offices Emergency Generator	
		EQUI 89	Null	JPDI Emergency Generator	
		EQUI 90	Null	HR Emergency Generator	
	Spray Booth/Coating Line	EQUI 1	EU026	Refuse Line Paint Booth	
		EQUI 2	EU027	Line 6 Paint & Touch-up Booth	
		EQUI 4	EU029	High Flow Line Paint & Prime Booth	
		EQUI 14	EU011	Line 4 Paint Booth	
		EQUI 15	EU013	Line 5 Paint Booth	
		EQUI 17	EU017	Refuse Line Prime Booth	
		EQUI 28	EU009	Line 3 Paint Booth	
		EQUI 37	Null	Line 3 Touch-up Booth	
		EQUI 40	Null	Line 4 Touch-up Booth	
		EQUI 43	Null	Line 5 Touch-up Booth	
		EQUI 70	Null	Monorail Small Parts Booth	
		EQUI 73	Null	Monorail Prime Booth	
		EQUI 75	Null	Monorail Topcoat Booth	
		EQUI 80	Null	Side Loader Paint Booth	
		EQUI 82	Null	Side Loader Prime Booth	
		EQUI 84	Null	Side Loader Clear Coat Booth	
	Spraying Equipment	EQUI 26	EU007	Large Parts Prime & Paint	
Structure	Building	STRU 69	BG008	Aftermarket Parts Building	
		STRU 70	BG009	R&D Building	
		STRU 71	BG001	Manufacturing Building	
		STRU 72	BG002	Training/Old CP/Main Office	
		STRU 73	BG003	Final Paint Line 3,4,5&6 Building	
		STRU 74	BG004	Final Paint Line 1&2 Building	
		STRU 75	BG005	Inspection Building	
		STRU 76	BG006	Final Paint Line 3,4,5&6 Building	
		STRU 77	BG007	North Paint Building	
		STRU 84	Null	JPDI Building	
	Stack/Vent	STRU 8	SV004	Large Parts Prime & Paint Air and Make-up	
		STRU 13	SV009	Line 3 Paint Booth	
		STRU 14	SV010	Line 3 Paint Booth	
		STRU 15	SV011	Line 3 Touch-up Booth	
		STRU 16	SV012	Line 3 Touch-up Booth	
		STRU 17	SV013	Lines 3-5 Curing Oven	
		STRU 18	SV014	Line 4 Paint Booth	

SI List

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	
Structure	Stack/Vent	STRU 19	SV015	Line 4 Paint Booth	
		STRU 20	SV016	Line 4 Touch-up Booth	
		STRU 21	SV017	Line 4 Touch-up Booth	
		STRU 22	SV018	Line 5 Paint Booth	
		STRU 23	SV019	Line 5 Paint Booth	
		STRU 24	SV020	Line 5 Touch-up Booth	
		STRU 25	SV021	Line 5 Touch-up Booth	
		STRU 27	SV023	Refuse Line Prime Booth	
		STRU 28	SV024	Refuse Line Paint Booth	
		STRU 29	SV025	Refuse Line Paint Booth	
		STRU 30	SV026	Refuse Line Prime Booth	
		STRU 31	SV027	Refuse Line Curing Oven	
		STRU 32	SV028	Refuse Line Curing Oven	
		STRU 33	SV029	Refuse Line Curing Oven	
		STRU 53	SV052	Large Parts Curing Oven	
		STRU 54	SV053	Large Parts Curing Oven	
		STRU 57	SV057	Line 6 Paint & Touch-up Booth	
		STRU 58	SV058	Line 6 Paint & Touch-up Booth	
		STRU 61	SV061	Line 6 Curing Oven	
		STRU 65	SV065	High Flow Line Oven	
		STRU 67	SV067	High Flow Line Paint & Prime Booth	
		STRU 86	Null	Burn Off Oven Vent	
		STRU 87	Null	Monorail Topcoat	
		STRU 88	Null	Monorail Topcoat	
		STRU 89	Null	Monorail Prime	
		STRU 90	Null	Monorail Prime	
		STRU 91	Null	Monorail Curing Oven	
		STRU 92	Null	Monorail Curing Oven	
		STRU 95	Null	MFG Robot Booth Paint	
		STRU 96	Null	MFG Manual Booth Paint	
		STRU 97	Null	Side Loader Prime Booth	
		STRU 98	Null	Side Loader Prime Booth	
		STRU 99	Null	Side Loader Clear Coat Booth Air Make-Up	
		STRU 100	Null	Side Loader Clear Coat Booth Air Make-Up	
		STRU 101	Null	Side Loader Curing Oven	
		STRU 102	Null	Monorail Blast Booth Stack (vents internally)	
Total Facility	Air Quality Total Facility	TFAC 1	03900014	McNeilus Truck & Manufacturing Inc	
Treatment	058-Mat or Panel Filter	TREA 1	CE026	Refuse Line Paint Booth Panel Filter	
		TREA 2	CE027	Line 6 Paint & Touch-up Booth Panel Filter	
		TREA 4	CE029	High Flow Line Paint & Prime Booth Panel Filter	
		TREA 12	CE007	Large Parts Prime & Paint Panel Filter	
		TREA 14	CE009	Line 3 Paint Booth Panel Filter	
		TREA 16	CE011	Line 4 Paint Booth Panel Filter	
		TREA 17	CE013	Line 5 Paint Booth Panel Filter	
		TREA 18	CE017	Refuse Line Prime Booth Panel Filter	
		TREA 30	CE009	Line 3 Touch-up Booth Panel Filter	
		TREA 31	CE011	Line 4 Touch-up Booth Panel Filter	
		TREA 32	CE013	Line 5 Touch-up Booth Panel Filter	
		TREA 35	Null	Monorail Prime Booth Panel Filter	
		TREA 36	Null	Monorail Paint Booth Panel Filter	
		TREA 38	Null	Side Loader Prime Booth Panel Filter	
		TREA 39	Null	Side Loader Paint Booth Panel Filter	
		TREA 40	Null	Side Loader Clear Coat Booth Panel Filter	
		TREA 41	Null	Refuse Line Prime Booth Panel Filter	
		TREA 42	Null	Side Loader Paint Booth Panel Filter	
		TREA 43	Null	Side Loader Paint Booth Panel Filter	
		TREA 44	Null	Side Loader Prime Booth Panel Filter	
		TREA 45	Null	Side Loader Prime Booth Panel Filter	
		TREA 46	Null	Side Loader Clear Coat Booth Panel Filter	
		TREA 47	Null	Side Loader Clear Coat Booth Panel Filter	

Insignificant Activities

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Status Description	Sub Attribute Description	
Activity	Insignificant Air Emissions Activity	Active / Existing	Minn. R. 7007.1300, subp. 3(E)	
			Minn. R. 7007.1300, subp. 3(F)	
			Minn. R. 7007.1300, subp. 4	

Emission Units 1

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Type	Subject Item ID	Delta Designation	Description	Manufacturer	Model	Max Design Capacity	Max Design Capacity Units	Material	Firing Method	Subject to CSAPR?	Electric Generating Capacity (MW)	Construction Start Date	Operation Start Date	Modification Date	
Dryer/Oven, indirect fired	EQUI 58	EU032	High Flow Line Oven	GFS-Global Finishing Solutions	U70171-G-R01	1.5	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/2021	1/1/2021	Null	
	EQUI 59	EU033	Line 6 Curing Oven (MUA 65)	RUPP	RAM25	7.1	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/2018	1/1/2018	Null	
	EQUI 71	Null	Burn Off Oven	PCP	PRC/1758L	1.8	million British thermal units/hours	Heat	Not coal burning	Null	Null	10/1/2021	10/1/2021	Null	
	EQUI 77	Null	Monorail Curing Oven	Global Finishing	CP-PLC-4841501-AB/CF	3	million British thermal units/hours	Heat	Not coal burning	Null	Null	7/1/2024	1/1/2025	Null	
	EQUI 86	Null	Side Loader Curing Oven	Global Finishing	CP-PLC-4841501-AB/CF	3	million British thermal units/hours	Heat	Not coal burning	Null	Null	7/1/2024	7/1/2024	Null	
	EQUI 91	EU018	Refuse Line Curing Oven	Eagle	S/N 1770	5.5	million British thermal units/hours	Heat	Not coal burning	Null	Null	8/10/1999	3/8/2000	Null	
	EQUI 92	EU021	Large Parts Curing Oven	Rupp	RAM22HT	1.65	million British thermal units/hours	Heat	Not coal burning	Null	Null	8/10/1999	3/8/2000	Null	
	EQUI 93	EU010	Lines 3-5 Curing Oven	McNeilus	NA	3.58	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
Other Combustion	EQUI 32	Null	Large Parts Prime & Paint Air Make-up	Titan	TA25NG	2.23	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 33	Null	Refuse Line Prime Booth Air Make-up	Eagle	NA	4.68	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 36	Null	High Flow Line Air Make-Up	Rupp	RAM33	4.68	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/2021	1/1/2021	Null	
	EQUI 38	Null	Line 3 Paint Booth Air Make-up	Applied Air	DFC218FH-RH	1.93	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 39	Null	Line 3 Touch-up Booth Air Make-up	Titan	225-NG-HRG	3.96	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 41	Null	Line 4 Paint Booth Air Make-up	Applied Air	DFC218FH-RH	1.93	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 42	Null	Line 4 Touch-up Booth Air Make-up	Titan	225-NG-HRG	3.96	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 44	Null	Line 5 Paint Booth Air Make-up	Weather Rite	55313E-2	2.2	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 45	Null	Line 5 Touch-up Booth Air Make-up	Titan	225-NG-HRG	3.96	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/1970	1/1/1970	Null	
	EQUI 46	Null	Line 6 Paint & Touch-up Booth Air Make-up	Titan	227-NG-HRD	4.36	million British thermal units/hours	Heat	Not coal burning	Null	Null	1/1/2011	1/1/2011	Null	
	EQUI 62	Null	Various Small Capacity Heaters	Various	Various	72.96	million British thermal units/hours	Heat	Not coal burning	Null	Null	2/1/1977	2/1/1977	Null	

Emission Units 2

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Type	Subject Item ID	Delta Designation	Description	Manufacturer	Model	Max Design Capacity	Max Design Capacity Units	Material	Engine Use	Firing Method	Engine Displacement	Engine Displacement Units	Construction Start Date	Operation Start Date	Modification Date	
Reciprocating IC Engine	EQUI 72	Null	MFG Offices Emergency Generator	Generac	SG 100	1.29	million British thermal units/hours	Heat	Emergency/blacks..	SI-4SLB	1	liters per cylinder	4/1/2018	4/1/2018	Null	
	EQUI 89	Null	JPDJ Emergency Generator	Generac	SG100	1.29	million British thermal units/hours	Heat	Emergency/blacks..	SI-4SLB	9,000	total cubic centimeters	4/1/2021	4/1/2021	Null	
	EQUI 90	Null	HR Emergency Generator	Generac	SG100	1.29	million British thermal units/hours	Heat	Emergency/blacks..	SI-4SLB	9,000	total cubic centimeters	4/1/2021	4/1/2021	Null	

Emission Units 3

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Type	Subject Item ID	Delta Designation	Description	Manufacturer	Model	Max Design Capacity	Max Design Capacity Units	Material	Construction Start Date	Operation Start Date	Modification Date	
Cleaning Equipment	EQUI 11	EU024	Plant-wide Clean Up Solvent Usage	NA-multiple solvents/stations	NA	25,604	gallons/years	Solvents	1/1/2000	1/1/2000	Null	
Furnace	EQUI 74	Null	Monorail Topcoat Booth Air Make-up (MAU 97)	Rupp	RAM 27	2.59	million British thermal units/hours	Heat	5/1/2023	11/1/2023	Null	
	EQUI 76	Null	Monorail Prime Booth Air Make-up (MUA 94)	Rupp	RAM 27	2.59	million British thermal units/hours	Heat	5/1/2023	11/1/2023	Null	
	EQUI 81	Null	Side Loader Paint Booth Air Make-Up (MAU 64)	Rupp	RAM 20	4.13	million British thermal units/hours	Heat	7/1/2024	7/1/2024	Null	
	EQUI 83	Null	Side Loader Prime Booth Air Make-up	Rupp	RAM 20	4.13	million British thermal units/hours	Heat	7/1/2024	7/1/2024	Null	
	EQUI 85	Null	Side Loader Clear Coat Booth Air Make-Up	Global Finishing	CP-PLC-4841501-AB/CF	4.13	million British thermal units/hours	Heat	7/1/2024	7/1/2024	Null	
	EQUI 88	Null	Various Power Wash Heaters	Alkota	10301	1.86	million British thermal units/hours	Heat	1/1/2000	1/1/2000	Null	
Other Emission Unit	EQUI 87	Null	Blast Booth Monorail	Wheelabrator	POM-4872-12-20	30	pounds/hours	Shot Material	1/1/2019	1/1/2019	Null	
Spray Booth/ Coating Line	EQUI 1	EU026	Refuse Line Paint Booth	Eagle	S/N 1793	16.88	gallons/hours	Paint	6/3/2005	7/3/2005	Null	
	EQUI 2	EU027	Line 6 Paint & Touch-up Booth	Kappers	NA	16.88	gallons/hours	Paint	1/1/2011	1/1/2011	Null	
	EQUI 4	EU029	High Flow Line Paint & Prime Booth	GFS-Global Finishing Solutions	U70171-H-R01	3.16	gallons/hours	Paint	1/1/2017	1/1/2017	Null	
	EQUI 14	EU011	Line 4 Paint Booth	JB I	NA	22.5	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 15	EU013	Line 5 Paint Booth	JB I	NA	22.5	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 17	EU017	Refuse Line Prime Booth	Eagle	S/N 1793	33.75	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 28	EU009	Line 3 Paint Booth	JB I	NA	22.5	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 37	Null	Line 3 Touch-up Booth	JB I	NA	22.5	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 40	Null	Line 4 Touch-up Booth	JB I	NA	22.5	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 43	Null	Line 5 Touch-up Booth	JB I	NA	22.5	gallons/hours	Paint	1/1/1970	1/1/1970	Null	
	EQUI 70	Null	Monorail Small Parts Booth	GFS	NA	0.38	gallons/hours	Paint	4/1/2018	4/1/2018	Null	
	EQUI 73	Null	Monorail Prime Booth	GFS	LEDDG-161530	22.5	gallons/hours	Coating	1/1/2021	1/1/2021	Null	
	EQUI 75	Null	Monorail Topcoat Booth	GFS	LEDDG-161530	22.5	gallons/hours	Coating	1/1/2021	1/1/2021	Null	
	EQUI 80	Null	Side Loader Paint Booth	Global Finishing	RCBG-252143-PDT-FR-O..	24.38	gallons/hours	Coating	7/1/2024	7/1/2024	Null	
	EQUI 82	Null	Side Loader Prime Booth	Global Finishing	RCBG-252143-PDT-FR-O..	24.38	gallons/hours	Coating	7/1/2024	7/1/2024	Null	

Emission Units 3

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Type	Subject Item ID	Delta Designation	Description	Manufacturer	Model	Max Design Capacity	Max Design Capacity Units	Material	Construction Start Date	Operation Start Date	Modification Date	
Spray Booth/Coating Line	EQUI 84	Null	Side Loader Clear Coat Booth	GFS	NA	24.38	gallons/hours	Coating	4/1/2023	4/1/2023	Null	
Spraying Equipment	EQUI 26	EU007	Large Parts Prime & Paint	JBH	NA	16.88	gallons/hours	Paint	1/1/1970	1/1/1970	Null	

Component Groups

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Group Member ID	
COMG 1	GP004	Coating Application	EQUI 1	
			EQUI 2	
			EQUI 4	
			EQUI 14	
			EQUI 15	
			EQUI 17	
			EQUI 26	
			EQUI 28	
			EQUI 37	
			EQUI 40	
			EQUI 43	
			EQUI 73	
			EQUI 75	
			EQUI 80	
			EQUI 82	
			EQUI 84	
COMG 2	GP003	New Indirect Heating Equipment as defined by Minn. R. 7011.0515, subp. 3	EQUI 36	
			EQUI 46	
			EQUI 58	
			EQUI 59	
			EQUI 62	
			EQUI 71	
			EQUI 74	
			EQUI 76	
			EQUI 77	
			EQUI 81	
			EQUI 83	
			EQUI 85	
			EQUI 86	
			EQUI 88	
COMG 3	GP001	Coating, Curing and Clean-up Operations	STRU 91	
			STRU 92	
			EQUI 1	
			EQUI 2	
			EQUI 4	
			EQUI 11	
			EQUI 14	
			EQUI 15	
			EQUI 17	

Component Groups

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Group Member ID	
COMG 3	GP001	Coating, Curing and Clean-up Operations	EQUI 26	
			EQUI 28	
			EQUI 32	
			EQUI 33	
			EQUI 36	
			EQUI 37	
			EQUI 38	
			EQUI 39	
			EQUI 40	
			EQUI 41	
			EQUI 42	
			EQUI 43	
			EQUI 44	
			EQUI 45	
			EQUI 46	
			EQUI 58	
			EQUI 59	
			EQUI 62	
			EQUI 70	
			EQUI 71	
			EQUI 72	
			EQUI 73	
			EQUI 74	
			EQUI 75	
			EQUI 76	
			EQUI 77	
			EQUI 80	
			EQUI 81	
			EQUI 82	
			EQUI 83	
			EQUI 84	
			EQUI 85	
			EQUI 86	
			EQUI 88	
			EQUI 89	
			EQUI 90	
			EQUI 91	
			EQUI 92	
			EQUI 93	

Component Groups

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Group Member ID	
COMG 4	GP002	Panel Filters	TREA 1	
			TREA 2	
			TREA 4	
			TREA 12	
			TREA 14	
			TREA 16	
			TREA 17	
			TREA 18	
			TREA 30	
			TREA 31	
			TREA 32	
			TREA 35	
			TREA 36	
			TREA 38	
			TREA 39	
			TREA 40	
			TREA 41	
			TREA 42	
			TREA 43	
			TREA 44	
COMG 7	Null	Coating Operations as defined by 40 CFR pt.63 subp. MMMM	TREA 45	
			TREA 46	
			TREA 47	
			EQUI 1	
			EQUI 2	
			EQUI 4	
			EQUI 11	
			EQUI 14	
			EQUI 15	
			EQUI 17	
			EQUI 26	
			EQUI 28	
			EQUI 37	
			EQUI 40	
			EQUI 43	
			EQUI 58	
			EQUI 59	
			EQUI 70	
			EQUI 73	

Component Groups

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Group Member ID	
COMG 7	Null	Coating Operations as defined by 40 CFR pt.63 subp. MMMM	EQUI 75	
			EQUI 77	
			EQUI 80	
			EQUI 82	
			EQUI 84	
			EQUI 86	
COMG 8	GP003	Existing Indirect Heating Equipment as defined by Minn. R. 7011.0510, subp. 3	EQUI 32	
			EQUI 33	
			EQUI 38	
			EQUI 39	
			EQUI 41	
			EQUI 42	
			EQUI 44	
			EQUI 45	
COMG 9	Null	Emergency Generators	EQUI 93	
			EQUI 72	
			EQUI 89	
			EQUI 90	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Component Group	Air Component Group	COMG 3	GP001	Coating, Curing and Clean-up Operations	1,1,2-Trichloroethane	0	0	1.5e-05	
					1,1,2,2-Tetrachloroethane	0	0	2.47e-05	
					1,2-Dibromoethane (Ethylene dibromide); EDB	0	0	2.08e-05	
					1,3-Butadiene	0	0	0.000648	
					1,3-Dichloropropene	0	0	1.24e-05	
					1,4-Dichlorobenzene (para-)	0	0	0.000774	
					Acetaldehyde	0	0	0.00273	
					Acrolein	0	0	0.00257	
					Arsenic compounds	0	0	0.000129	
					Benzene	0	0	0.0029	
					Beryllium Compounds	0	0	7.74e-06	
					Cadmium compounds	0	0	0.000709	
					Carbon Dioxide	0	0	77,481	
					Carbon Dioxide Equivalent	0	0	77,941	
					Carbon Monoxide	0	0	55.25	
					Carbon tetrachloride	0	0	1.73e-05	
					Chlorobenzene (Monochlorobenzene)	0	0	1.26e-05	
					Chloroform	0	0	1.34e-05	
					Chromium compounds	0	0	0.000903	
					Cobalt compounds	0	0	5.42e-05	
					Cumene (Isopropylbenzene)	0	0	5.4	
					Dichloromethane (Methylene chloride)	0	0	4.03e-05	
					Ethylbenzene	0	0	12.9	
					Formaldehyde	0	0	0.63	
					Glycol ethers	0	0	237	
					HAPs - Total	0	0	237	
					Hexamethylene-1,6-diisocyanate	0	0	1.12	
					Hexane	0	0	1.16	
					Lead Compounds	0	0	0.000322	
					Manganese compounds	0	0	0.000245	
					Mercury Compounds	0	0	0.000168	
					Methane	0	0	1.49	
					Methanol	0	0	2.39	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	0	0	99.5	
					Naphthalene	0	0	0.000488	
					Nickel compounds	0	0	0.00135	
					Nitrogen Oxides	0	0	65.01	
					Nitrous Oxide	0	0	1.42	
					Particulate Matter	0	0	71.2	
					PM < 2.5 micron	0	0	71.2	
					PM < 10 micron	0	0	71.2	
					Polycyclic organic matter	0	0	0.000195	
					Selenium compounds	0	0	1.55e-05	
					Styrene	0	0	1.16e-05	
					Sulfur Dioxide	0	0	0.387	
					Toluene	0	0	11.7	
					Vinyl chloride (chloroethene)	0	0	7.02e-06	
					Volatile Organic Compounds	0	0	237	
					Xylenes, Total	0	0	65.2	
Equipment	Cleaning Equipment	EQUI 11	EU024	Plant-wide Clean Up Solvent Usage	HAPs - Total	6.95	30.5	0	
					Methanol	0.291	1.28	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	2.28	9.97	0	
					Toluene	2.37	10.4	0	
					Volatile Organic Compounds	50.6	221	0	
					Xylenes, Total	2.02	8.83	0	
	Dryer/Oven, indirect fired	EQUI 58	EU032	High Flow Line Oven	1,4-Dichlorobenzene (para-)	1.76e-06	7.73e-06	0	
					Arsenic compounds	2.94e-07	1.29e-06	0	
					Benzene	3.09e-06	1.35e-05	0	
					Beryllium Compounds	1.76e-08	7.73e-08	0	
					Cadmium compounds	1.62e-06	7.09e-06	0	
					Carbon Dioxide	176	773	0	
					Carbon Dioxide Equivalent	178	778	0	
					Carbon Monoxide	0.124	0.541	0	
					Chromium compounds	2.06e-06	9.02e-06	0	
					Cobalt compounds	1.24e-07	5.41e-07	0	
					Formaldehyde	0.00011	0.000483	0	
					HAPs - Total	0.00278	0.0122	0	
					Hexane	0.00265	0.0116	0	
					Lead Compounds	7.35e-07	3.22e-06	0	
					Manganese compounds	5.59e-07	2.45e-06	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Dryer/Oven, indirect fired	EQUI 58	EU032	High Flow Line Oven	Mercury Compounds	3.82e-07	1.67e-06	0	
					Methane	0.00338	0.0148	0	
					Naphthalene	8.97e-07	3.93e-06	0	
					Nickel compounds	3.09e-06	1.35e-05	0	
					Nitrogen Oxides	0.147	0.644	0	
					Nitrous Oxide	0.00324	0.0142	0	
					Particulate Matter	0.0112	0.0489	0	
					PM < 2.5 micron	0.0112	0.0489	0	
					PM < 10 micron	0.0112	0.0489	0	
					Polycyclic organic matter	1.3e-07	5.68e-07	0	
					Selenium compounds	3.53e-08	1.55e-07	0	
					Sulfur Dioxide	0.000882	0.00386	0	
					Toluene	5e-06	2.19e-05	0	
					Volatile Organic Compounds	0.00809	0.0354	0	
		EQUI 59	EU033	Line 6 Curing Oven (MUA 85)	1,4-Dichlorobenzene (para-)	8.35e-06	3.66e-05	0	
					Arsenic compounds	1.39e-06	6.1e-06	0	
					Benzene	1.46e-05	6.4e-05	0	
					Beryllium Compounds	8.35e-08	3.66e-07	0	
					Cadmium compounds	7.66e-06	3.35e-05	0	
					Carbon Dioxide	835	3,660	0	
					Carbon Dioxide Equivalent	840	3,680	0	
					Carbon Monoxide	0.585	2.56	0	
					Chromium compounds	9.75e-06	4.27e-05	0	
					Cobalt compounds	5.85e-07	2.56e-06	0	
					Formaldehyde	0.000522	0.00229	0	
					HAPs - Total	0.0131	0.0576	0	
					Hexane	0.0125	0.0549	0	
					Lead Compounds	3.48e-06	1.52e-05	0	
					Manganese compounds	2.65e-06	1.16e-05	0	
					Mercury Compounds	1.81e-06	7.93e-06	0	
					Methane	0.016	0.0701	0	
					Naphthalene	4.25e-06	1.86e-05	0	
					Nickel compounds	1.46e-05	6.4e-05	0	
					Nitrogen Oxides	0.696	3.05	0	
					Nitrous Oxide	0.0153	0.0671	0	
					Particulate Matter	0.0529	0.232	0	
					PM < 2.5 micron	0.0529	0.232	0	
					PM < 10 micron	0.0529	0.232	0	
					Polycyclic organic matter	6.14e-07	2.69e-06	0	
					Selenium compounds	1.67e-07	7.32e-07	0	
					Sulfur Dioxide	0.00417	0.0183	0	
					Toluene	2.37e-05	0.000104	0	
					Volatile Organic Compounds	0.0383	0.168	0	
		EQUI 71	Null	Burn Off Oven	1,4-Dichlorobenzene (para-)	2.12e-06	9.28e-06	0	
					Arsenic compounds	3.53e-07	1.55e-06	0	
					Benzene	3.71e-06	1.62e-05	0	
					Beryllium Compounds	2.12e-08	9.28e-08	0	
					Cadmium compounds	1.94e-06	8.5e-06	0	
					Carbon Dioxide	212	928	0	
					Carbon Dioxide Equivalent	213	933	0	
					Carbon Monoxide	0.148	0.649	0	
					Chromium compounds	2.47e-06	1.08e-05	0	
					Cobalt compounds	1.48e-07	6.49e-07	0	
					Formaldehyde	0.000132	0.00058	0	
					HAPs - Total	0.00333	0.0146	0	
					Hexane	0.00318	0.0139	0	
					Lead Compounds	8.82e-07	3.86e-06	0	
					Manganese compounds	6.71e-07	2.94e-06	0	
					Mercury Compounds	4.59e-07	2.01e-06	0	
					Methane	0.00406	0.0178	0	
					Naphthalene	1.08e-06	4.71e-06	0	
					Nickel compounds	3.71e-06	1.62e-05	0	
					Nitrogen Oxides	0.176	0.773	0	
					Nitrous Oxide	0.00388	0.017	0	
					Particulate Matter	0.0134	0.0587	0	
					PM < 2.5 micron	0.0134	0.0587	0	
					PM < 10 micron	0.0134	0.0587	0	
					Polycyclic organic matter	1.56e-07	6.82e-07	0	
					Selenium compounds	4.24e-08	1.86e-07	0	
					Sulfur Dioxide	0.00106	0.00464	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Dryer/Oven, indirect fired	EQUI 71	Null	Burn Off Oven	Toluene	6e-06	2.63e-05	0	
					Volatile Organic Compounds	0.0097	0.0425	0	
		EQUI 77	Null	Monorail Curing Oven	1,4-Dichlorobenzene (para-)	3.53e-06	1.55e-05	0	
					Arsenic compounds	5.88e-07	2.58e-06	0	
					Benzene	6.18e-06	2.71e-05	0	
					Beryllium Compounds	3.53e-08	1.55e-07	0	
					Cadmium compounds	3.24e-06	1.42e-05	0	
					Carbon Dioxide	353	1,550	0	
					Carbon Dioxide Equivalent	355	1,560	0	
					Carbon Monoxide	0.247	1.08	0	
					Chromium compounds	4.12e-06	1.8e-05	0	
					Cobalt compounds	2.47e-07	1.08e-06	0	
					Formaldehyde	0.000221	0.000966	0	
					HAPs - Total	0.00555	0.0243	0	
					Hexane	0.00529	0.0232	0	
					Lead Compounds	1.47e-06	6.44e-06	0	
					Manganese compounds	1.12e-06	4.9e-06	0	
					Mercury Compounds	7.65e-07	3.35e-06	0	
					Methane	0.00677	0.0296	0	
					Naphthalene	1.79e-06	7.86e-06	0	
					Nickel compounds	6.18e-06	2.71e-05	0	
					Nitrogen Oxides	0.294	1.29	0	
					Nitrous Oxide	0.00647	0.0283	0	
					Particulate Matter	0.0224	0.0979	0	
					PM < 2.5 micron	0.0224	0.0979	0	
					PM < 10 micron	0.0224	0.0979	0	
					Polycyclic organic matter	2.59e-07	1.14e-06	0	
					Selenium compounds	7.06e-08	3.09e-07	0	
					Sulfur Dioxide	0.00176	0.00773	0	
					Toluene	1e-05	4.38e-05	0	
					Volatile Organic Compounds	0.0162	0.0708	0	
		EQUI 86	Null	Side Loader Curing Oven	1,4-Dichlorobenzene (para-)	1.94e-06	8.5e-06	0	
					Arsenic compounds	3.24e-07	1.42e-06	0	
					Benzene	3.4e-06	1.49e-05	0	
					Beryllium Compounds	1.94e-08	8.5e-08	0	
					Cadmium compounds	1.78e-06	7.79e-06	0	
					Carbon Dioxide	194	850	0	
					Carbon Dioxide Equivalent	195	855	0	
					Carbon Monoxide	0.136	0.595	0	
					Chromium compounds	2.26e-06	9.92e-06	0	
					Cobalt compounds	1.36e-07	5.95e-07	0	
					Formaldehyde	0.000121	0.000531	0	
					HAPs - Total	0.00305	0.0134	0	
					Hexane	0.00291	0.0128	0	
					Lead Compounds	8.09e-07	3.54e-06	0	
					Manganese compounds	6.15e-07	2.69e-06	0	
					Mercury Compounds	4.21e-07	1.84e-06	0	
					Methane	0.00372	0.0163	0	
					Naphthalene	9.87e-07	4.32e-06	0	
					Nickel compounds	3.4e-06	1.49e-05	0	
					Nitrogen Oxides	0.162	0.708	0	
					Nitrous Oxide	0.00356	0.0156	0	
					Particulate Matter	0.0123	0.0538	0	
					PM < 2.5 micron	0.0123	0.0538	0	
					PM < 10 micron	0.0123	0.0538	0	
					Polycyclic organic matter	1.43e-07	6.25e-07	0	
					Selenium compounds	3.88e-08	1.7e-07	0	
					Sulfur Dioxide	0.00097	0.00425	0	
					Toluene	5.5e-06	2.41e-05	0	
					Volatile Organic Compounds	0.00889	0.039	0	
		EQUI 91	EU018	Refuse Line Curing Oven	1,4-Dichlorobenzene (para-)	6.47e-06	2.83e-05	0	
					Arsenic compounds	1.08e-06	4.72e-06	0	
					Benzene	1.13e-05	4.96e-05	0	
					Beryllium Compounds	6.47e-08	2.83e-07	0	
					Cadmium compounds	5.93e-06	2.6e-05	0	
					Carbon Dioxide	647	2,830	0	
					Carbon Dioxide Equivalent	651	2,850	0	
					Carbon Monoxide	0.453	1.98	0	
					Chromium compounds	7.55e-06	3.31e-05	0	
					Cobalt compounds	4.53e-07	1.98e-06	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Dryer/Oven, indirect fired	EQUI 91	EU018	Refuse Line Curing Oven	Formaldehyde	0.000404	0.00177	0	
					HAPs - Total	0.0102	0.0446	0	
					Hexane	0.00971	0.0425	0	
					Lead Compounds	2.7e-06	1.18e-05	0	
					Manganese compounds	2.05e-06	8.97e-06	0	
					Mercury Compounds	1.4e-06	6.14e-06	0	
					Methane	0.0124	0.0543	0	
					Naphthalene	3.29e-06	1.44e-05	0	
					Nickel compounds	1.13e-05	4.96e-05	0	
					Nitrogen Oxides	0.539	2.36	0	
					Nitrous Oxide	0.0119	0.052	0	
					Particulate Matter	0.041	0.179	0	
					PM < 2.5 micron	0.041	0.179	0	
					PM < 10 micron	0.041	0.179	0	
					Polycyclic organic matter	4.76e-07	2.08e-06	0	
					Selenium compounds	1.29e-07	5.67e-07	0	
					Sulfur Dioxide	0.00323	0.0142	0	
					Toluene	1.83e-05	8.03e-05	0	
					Volatile Organic Compounds	0.0296	0.13	0	
		EQUI 92	EU021	Large Parts Curing Oven	1,4-Dichlorobenzene (para-)	1.94e-06	8.5e-06	0	
					Arsenic compounds	3.24e-07	1.42e-06	0	
					Benzene	3.4e-06	1.49e-05	0	
					Beryllium Compounds	1.94e-08	8.5e-08	0	
					Cadmium compounds	1.78e-06	7.79e-06	0	
					Carbon Dioxide	194	850	0	
					Carbon Dioxide Equivalent	195	855	0	
					Carbon Monoxide	0.136	0.595	0	
					Chromium compounds	2.26e-06	9.92e-06	0	
					Cobalt compounds	1.36e-07	5.95e-07	0	
					Formaldehyde	0.000121	0.000531	0	
					HAPs - Total	0.00305	0.0134	0	
					Hexane	0.00291	0.0128	0	
					Lead Compounds	8.09e-07	3.54e-06	0	
					Manganese compounds	6.15e-07	2.69e-06	0	
					Mercury Compounds	4.21e-07	1.84e-06	0	
					Methane	0.00372	0.0163	0	
					Naphthalene	9.87e-07	4.32e-06	0	
					Nickel compounds	3.4e-06	1.49e-05	0	
					Nitrogen Oxides	0.162	0.708	0	
					Nitrous Oxide	0.00356	0.0156	0	
					Particulate Matter	0.0123	0.0538	0	
					PM < 2.5 micron	0.0123	0.0538	0	
					PM < 10 micron	0.0123	0.0538	0	
					Polycyclic organic matter	1.43e-07	6.25e-07	0	
					Selenium compounds	3.88e-08	1.7e-07	0	
					Sulfur Dioxide	0.00097	0.00425	0	
					Toluene	5.5e-06	2.41e-05	0	
					Volatile Organic Compounds	0.00889	0.039	0	
		EQUI 93	EU010	Lines 3-5 Curing Oven	1,4-Dichlorobenzene (para-)	4.21e-06	1.84e-05	0	
					Arsenic compounds	7.01e-07	3.07e-06	0	
					Benzene	7.36e-06	3.22e-05	0	
					Beryllium Compounds	4.21e-08	1.84e-07	0	
					Cadmium compounds	3.86e-06	1.69e-05	0	
					Carbon Dioxide	421	1,840	0	
					Carbon Dioxide Equivalent	423	1,850	0	
					Carbon Monoxide	0.294	1.29	0	
					Chromium compounds	4.91e-06	2.15e-05	0	
					Cobalt compounds	2.94e-07	1.29e-06	0	
					Formaldehyde	0.000263	0.00115	0	
					HAPs - Total	0.00662	0.029	0	
					Hexane	0.00631	0.0276	0	
					Lead Compounds	1.75e-06	7.68e-06	0	
					Manganese compounds	1.33e-06	5.83e-06	0	
					Mercury Compounds	9.11e-07	3.99e-06	0	
					Methane	0.00806	0.0353	0	
					Naphthalene	2.14e-06	9.36e-06	0	
					Nickel compounds	7.36e-06	3.22e-05	0	
					Nitrogen Oxides	0.35	1.53	0	
					Nitrous Oxide	0.00771	0.0338	0	
					Particulate Matter	0.0266	0.117	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Dryer/Oven, indirect fired	EQUI 93	EU010	Lines 3-5 Curing Oven	PM < 2.5 micron	0.0266	0.117	0	
					PM < 10 micron	0.0266	0.117	0	
					Polycyclic organic matter	3.09e-07	1.35e-06	0	
					Selenium compounds	8.41e-08	3.68e-07	0	
					Sulfur Dioxide	0.0021	0.00921	0	
					Toluene	1.19e-05	5.22e-05	0	
					Volatile Organic Compounds	0.0193	0.0844	0	
	Furnace	EQUI 74	Null	Monorail Topcoat Booth Air Make-up (MAU 97)	1,4-Dichlorobenzene (para-)	3.05e-06	1.34e-05	0	
					Arsenic compounds	5.08e-07	2.23e-06	0	
					Benzene	5.34e-06	2.34e-05	0	
					Beryllium Compounds	3.05e-08	1.34e-07	0	
					Cadmium compounds	2.8e-06	1.22e-05	0	
					Carbon Dioxide	305	1,340	0	
					Carbon Dioxide Equivalent	307	1,340	0	
					Carbon Monoxide	0.213	0.935	0	
					Chromium compounds	3.56e-06	1.56e-05	0	
					Cobalt compounds	2.13e-07	9.35e-07	0	
					Formaldehyde	0.000191	0.000835	0	
					HAPs - Total	0.0048	0.021	0	
					Hexane	0.00457	0.02	0	
					Lead Compounds	1.27e-06	5.57e-06	0	
					Manganese compounds	9.66e-07	4.23e-06	0	
					Mercury Compounds	6.61e-07	2.89e-06	0	
					Methane	0.00584	0.0256	0	
					Naphthalene	1.55e-06	6.79e-06	0	
					Nickel compounds	5.34e-06	2.34e-05	0	
					Nitrogen Oxides	0.254	1.11	0	
					Nitrous Oxide	0.00559	0.0245	0	
					Particulate Matter	0.0193	0.0846	0	
					PM < 2.5 micron	0.0193	0.0846	0	
					PM < 10 micron	0.0193	0.0846	0	
					Polycyclic organic matter	2.24e-07	9.82e-07	0	
					Selenium compounds	6.1e-08	2.67e-07	0	
					Sulfur Dioxide	0.00152	0.00668	0	
					Toluene	8.64e-06	3.78e-05	0	
					Volatile Organic Compounds	0.014	0.0612	0	
		EQUI 76	Null	Monorail Prime Booth Air Make-up (MUA 94)	1,4-Dichlorobenzene (para-)	3.05e-06	1.34e-05	0	
					Arsenic compounds	5.08e-07	2.23e-06	0	
					Benzene	5.34e-06	2.34e-05	0	
					Beryllium Compounds	3.05e-08	1.34e-07	0	
					Cadmium compounds	2.8e-06	1.22e-05	0	
					Carbon Dioxide	305	1,340	0	
					Carbon Dioxide Equivalent	307	1,340	0	
					Carbon Monoxide	0.213	0.935	0	
					Chromium compounds	3.56e-06	1.56e-05	0	
					Cobalt compounds	2.13e-07	9.35e-07	0	
					Formaldehyde	0.000191	0.000835	0	
					HAPs - Total	0.0048	0.021	0	
					Hexane	0.00457	0.02	0	
					Lead Compounds	1.27e-06	5.57e-06	0	
					Manganese compounds	9.66e-07	4.23e-06	0	
					Mercury Compounds	6.61e-07	2.89e-06	0	
					Methane	0.00584	0.0256	0	
					Naphthalene	1.55e-06	6.79e-06	0	
					Nickel compounds	5.34e-06	2.34e-05	0	
					Nitrogen Oxides	0.254	1.11	0	
					Nitrous Oxide	0.00559	0.0245	0	
					Particulate Matter	0.0193	0.0846	0	
					PM < 2.5 micron	0.0193	0.0846	0	
					PM < 10 micron	0.0193	0.0846	0	
					Polycyclic organic matter	2.24e-07	9.82e-07	0	
					Selenium compounds	6.1e-08	2.67e-07	0	
					Sulfur Dioxide	0.00152	0.00668	0	
					Toluene	8.64e-06	3.78e-05	0	
					Volatile Organic Compounds	0.014	0.0612	0	
		EQUI 81	Null	Side Loader Paint Booth Air Make-Up (MAU 64)	1,4-Dichlorobenzene (para-)	4.85e-06	2.13e-05	0	
					Arsenic compounds	8.09e-07	3.54e-06	0	
					Benzene	8.49e-06	3.72e-05	0	
					Beryllium Compounds	4.85e-08	2.13e-07	0	
					Cadmium compounds	4.45e-06	1.95e-05	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Furnace	EQUI 81	Null	Side Loader Paint Booth Air Make-Up (MAU 64)	Carbon Dioxide	485	2,130	0	
					Carbon Dioxide Equivalent	488	2,140	0	
					Carbon Monoxide	0.34	1.49	0	
					Chromium compounds	5.66e-06	2.48e-05	0	
					Cobalt compounds	3.4e-07	1.49e-06	0	
					Formaldehyde	0.000303	0.00133	0	
					HAPs - Total	0.00764	0.0335	0	
					Hexane	0.00728	0.0319	0	
					Lead Compounds	2.02e-06	8.86e-06	0	
					Manganese compounds	1.54e-06	6.73e-06	0	
					Mercury Compounds	1.05e-06	4.61e-06	0	
					Methane	0.0093	0.0407	0	
					Naphthalene	2.47e-06	1.08e-05	0	
					Nickel compounds	8.49e-06	3.72e-05	0	
					Nitrogen Oxides	0.404	1.77	0	
					Nitrous Oxide	0.0089	0.039	0	
					Particulate Matter	0.0307	0.135	0	
					PM < 2.5 micron	0.0307	0.135	0	
					PM < 10 micron	0.0307	0.135	0	
					Polycyclic organic matter	3.57e-07	1.56e-06	0	
					Selenium compounds	9.71e-08	4.25e-07	0	
					Sulfur Dioxide	0.00243	0.0106	0	
					Toluene	1.38e-05	6.02e-05	0	
					Volatile Organic Compounds	0.0222	0.0974	0	
		EQUI 83	Null	Side Loader Prime Booth Air Make-up	1,4-Dichlorobenzene (para-)	4.85e-06	2.13e-05	0	
					Arsenic compounds	8.09e-07	3.54e-06	0	
					Benzene	8.49e-06	3.72e-05	0	
					Beryllium Compounds	4.85e-08	2.13e-07	0	
					Cadmium compounds	4.45e-06	1.95e-05	0	
					Carbon Dioxide	485	2,130	0	
					Carbon Dioxide Equivalent	488	2,140	0	
					Carbon Monoxide	0.34	1.49	0	
					Chromium compounds	5.66e-06	2.48e-05	0	
					Cobalt compounds	3.4e-07	1.49e-06	0	
					Formaldehyde	0.000303	0.00133	0	
					HAPs - Total	0.00764	0.0335	0	
					Hexane	0.00728	0.0319	0	
					Lead Compounds	2.02e-06	8.86e-06	0	
					Manganese compounds	1.54e-06	6.73e-06	0	
					Mercury Compounds	1.05e-06	4.61e-06	0	
					Methane	0.0093	0.0407	0	
					Naphthalene	2.47e-06	1.08e-05	0	
					Nickel compounds	8.49e-06	3.72e-05	0	
					Nitrogen Oxides	0.404	1.77	0	
					Nitrous Oxide	0.0089	0.039	0	
					Particulate Matter	0.0307	0.135	0	
					PM < 2.5 micron	0.0307	0.135	0	
					PM < 10 micron	0.0307	0.135	0	
					Polycyclic organic matter	3.57e-07	1.56e-06	0	
					Selenium compounds	9.71e-08	4.25e-07	0	
					Sulfur Dioxide	0.00243	0.0106	0	
					Toluene	1.38e-05	6.02e-05	0	
					Volatile Organic Compounds	0.0222	0.0974	0	
		EQUI 85	Null	Side Loader Clear Coat Booth Air Make-Up	1,4-Dichlorobenzene (para-)	4.85e-06	2.13e-05	0	
					Arsenic compounds	8.09e-07	3.54e-06	0	
					Benzene	8.49e-06	3.72e-05	0	
					Beryllium Compounds	4.85e-08	2.13e-07	0	
					Cadmium compounds	4.45e-06	1.95e-05	0	
					Carbon Dioxide	485	2,130	0	
					Carbon Dioxide Equivalent	488	2,140	0	
					Carbon Monoxide	0.34	1.49	0	
					Chromium compounds	5.66e-06	2.48e-05	0	
					Cobalt compounds	3.4e-07	1.49e-06	0	
					Formaldehyde	0.000303	0.00133	0	
					HAPs - Total	0.00764	0.0335	0	
					Hexane	0.00728	0.0319	0	
					Lead Compounds	2.02e-06	8.86e-06	0	
					Manganese compounds	1.54e-06	6.73e-06	0	
					Mercury Compounds	1.05e-06	4.61e-06	0	
					Methane	0.0093	0.0407	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Furnace	EQUI 85	Null	Side Loader Clear Coat Booth Air Make-Up	Naphthalene	2.47e-06	1.08e-05	0	
					Nickel compounds	3.49e-06	3.72e-05	0	
					Nitrogen Oxides	0.404	1.77	0	
					Nitrous Oxide	0.0089	0.039	0	
					Particulate Matter	0.0307	0.135	0	
					PM < 2.5 micron	0.0307	0.135	0	
					PM < 10 micron	0.0307	0.135	0	
					Polycyclic organic matter	3.57e-07	1.56e-06	0	
					Selenium compounds	9.71e-08	4.25e-07	0	
					Sulfur Dioxide	0.00243	0.0106	0	
					Toluene	1.38e-05	6.02e-05	0	
					Volatile Organic Compounds	0.0222	0.0974	0	
		EQUI 88	Null	Various Power Wash Heaters	1,4-Dichlorobenzene (para-)	2.19e-06	9.58e-06	0	
					Arsenic compounds	3.65e-07	1.6e-06	0	
					Benzene	3.83e-06	1.68e-05	0	
					Beryllium Compounds	2.19e-08	9.58e-08	0	
					Cadmium compounds	2.01e-06	8.79e-06	0	
					Carbon Dioxide	219	958	0	
					Carbon Dioxide Equivalent	220	964	0	
					Carbon Monoxide	0.153	0.671	0	
					Chromium compounds	2.55e-06	1.12e-05	0	
					Cobalt compounds	1.53e-07	6.71e-07	0	
					Formaldehyde	0.000137	0.000599	0	
					HAPs - Total	0.00344	0.0151	0	
					Hexane	0.00328	0.0144	0	
					Lead Compounds	9.12e-07	3.99e-06	0	
					Manganese compounds	6.93e-07	3.04e-06	0	
					Mercury Compounds	4.74e-07	2.08e-06	0	
					Methane	0.00419	0.0184	0	
					Naphthalene	1.11e-06	4.87e-06	0	
					Nickel compounds	3.83e-06	1.68e-05	0	
					Nitrogen Oxides	0.182	0.798	0	
					Nitrous Oxide	0.00401	0.0176	0	
					Particulate Matter	0.0139	0.0607	0	
					PM < 2.5 micron	0.0139	0.0607	0	
					PM < 10 micron	0.0139	0.0607	0	
					Polycyclic organic matter	1.61e-07	7.04e-07	0	
					Selenium compounds	4.38e-08	1.92e-07	0	
					Sulfur Dioxide	0.00109	0.00479	0	
					Toluene	6.2e-06	2.72e-05	0	
					Volatile Organic Compounds	0.01	0.0439	0	
	Other Combustion	EQUI 32	Null	Large Parts Prime & Paint Air Make-up	1,4-Dichlorobenzene (para-)	2.62e-06	1.15e-05	0	
					Arsenic compounds	4.36e-07	1.91e-06	0	
					Benzene	4.58e-06	2.01e-05	0	
					Beryllium Compounds	2.62e-08	1.15e-07	0	
					Cadmium compounds	2.4e-06	1.05e-05	0	
					Carbon Dioxide	262	1,150	0	
					Carbon Dioxide Equivalent	263	1,150	0	
					Carbon Monoxide	0.183	0.803	0	
					Chromium compounds	3.05e-06	1.34e-05	0	
					Cobalt compounds	1.83e-07	8.03e-07	0	
					Formaldehyde	0.000164	0.000717	0	
					HAPs - Total	0.00412	0.018	0	
					Hexane	0.00393	0.0172	0	
					Lead Compounds	1.09e-06	4.78e-06	0	
					Manganese compounds	8.29e-07	3.63e-06	0	
					Mercury Compounds	5.67e-07	2.48e-06	0	
					Methane	0.00502	0.022	0	
					Naphthalene	1.33e-06	5.83e-06	0	
					Nickel compounds	4.58e-06	2.01e-05	0	
					Nitrogen Oxides	0.218	0.955	0	
					Nitrous Oxide	0.0048	0.021	0	
					Particulate Matter	0.0166	0.0726	0	
					PM < 2.5 micron	0.0166	0.0726	0	
					PM < 10 micron	0.0166	0.0726	0	
					Polycyclic organic matter	1.92e-07	8.43e-07	0	
					Selenium compounds	5.24e-08	2.29e-07	0	
					Sulfur Dioxide	0.00131	0.00573	0	
					Toluene	7.42e-06	3.25e-05	0	
					Volatile Organic Compounds	0.012	0.0525	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Other Combustion	EQUI 33	Null	Refuse Line Prime Booth Air Make-up	1,4-Dichlorobenzene (para-)	5.5e-06	2.41e-05	0	
					Arsenic compounds	9.17e-07	4.02e-06	0	
					Benzene	9.63e-06	4.22e-05	0	
					Beryllium Compounds	5.5e-08	2.41e-07	0	
					Cadmium compounds	5.04e-06	2.21e-05	0	
					Carbon Dioxide	550	2,410	0	
					Carbon Dioxide Equivalent	553	2,420	0	
					Carbon Monoxide	0.385	1.69	0	
					Chromium compounds	6.42e-06	2.81e-05	0	
					Cobalt compounds	3.85e-07	1.69e-06	0	
					Formaldehyde	0.000344	0.00151	0	
					HAPs - Total	0.00866	0.0379	0	
					Hexane	0.00825	0.0361	0	
					Lead Compounds	2.29e-06	1e-05	0	
					Manganese compounds	1.74e-06	7.63e-06	0	
					Mercury Compounds	1.19e-06	5.22e-06	0	
					Methane	0.0105	0.0462	0	
					Naphthalene	2.8e-06	1.22e-05	0	
					Nickel compounds	9.63e-06	4.22e-05	0	
					Nitrogen Oxides	0.458	2.01	0	
					Nitrous Oxide	0.0101	0.0442	0	
					Particulate Matter	0.0348	0.153	0	
					PM < 2.5 micron	0.0348	0.153	0	
					PM < 10 micron	0.0348	0.153	0	
					Polycyclic organic matter	4.04e-07	1.77e-06	0	
					Selenium compounds	1.1e-07	4.82e-07	0	
					Sulfur Dioxide	0.00275	0.012	0	
					Toluene	1.56e-05	6.83e-05	0	
					Volatile Organic Compounds	0.0252	0.11	0	
		EQUI 36	Null	High Flow Line Air Make-Up	1,4-Dichlorobenzene (para-)	5.5e-06	2.41e-05	0	
					Arsenic compounds	9.17e-07	4.02e-06	0	
					Benzene	9.63e-06	4.22e-05	0	
					Beryllium Compounds	5.5e-08	2.41e-07	0	
					Cadmium compounds	5.04e-06	2.21e-05	0	
					Carbon Dioxide	550	2,410	0	
					Carbon Dioxide Equivalent	553	2,420	0	
					Carbon Monoxide	0.385	1.69	0	
					Chromium compounds	6.42e-06	2.81e-05	0	
					Cobalt compounds	3.85e-07	1.69e-06	0	
					Formaldehyde	0.000344	0.00151	0	
					HAPs - Total	0.00866	0.0379	0	
					Hexane	0.00825	0.0361	0	
					Lead Compounds	2.29e-06	1e-05	0	
					Manganese compounds	1.74e-06	7.63e-06	0	
					Mercury Compounds	1.19e-06	5.22e-06	0	
					Methane	0.0105	0.0462	0	
					Naphthalene	2.8e-06	1.22e-05	0	
					Nickel compounds	9.63e-06	4.22e-05	0	
					Nitrogen Oxides	0.458	2.01	0	
					Nitrous Oxide	0.0101	0.0442	0	
					Particulate Matter	0.0348	0.153	0	
					PM < 2.5 micron	0.0348	0.153	0	
					PM < 10 micron	0.0348	0.153	0	
					Polycyclic organic matter	4.04e-07	1.77e-06	0	
					Selenium compounds	1.1e-07	4.82e-07	0	
					Sulfur Dioxide	0.00275	0.012	0	
					Toluene	1.56e-05	6.83e-05	0	
					Volatile Organic Compounds	0.0252	0.11	0	
		EQUI 38	Null	Line 3 Paint Booth Air Make-up	1,4-Dichlorobenzene (para-)	2.26e-06	9.92e-06	0	
					Arsenic compounds	3.77e-07	1.65e-06	0	
					Benzene	3.96e-06	1.74e-05	0	
					Beryllium Compounds	2.26e-08	9.92e-08	0	
					Cadmium compounds	2.08e-06	9.09e-06	0	
					Carbon Dioxide	226	992	0	
					Carbon Dioxide Equivalent	228	998	0	
					Carbon Monoxide	0.159	0.694	0	
					Chromium compounds	2.64e-06	1.16e-05	0	
					Cobalt compounds	1.59e-07	6.94e-07	0	
					Formaldehyde	0.000142	0.00062	0	
					HAPs - Total	0.00356	0.0156	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Other Combustion	EQUI 38	Null	Line 3 Paint Booth Air Make-up	Hexane	0.0034	0.0149	0	
					Lead Compounds	9.44e-07	4.13e-06	0	
					Manganese compounds	7.17e-07	3.14e-06	0	
					Mercury Compounds	4.91e-07	2.15e-06	0	
					Methane	0.00434	0.019	0	
					Naphthalene	1.15e-06	5.04e-06	0	
					Nickel compounds	3.96e-06	1.74e-05	0	
					Nitrogen Oxides	0.189	0.826	0	
					Nitrous Oxide	0.00415	0.0182	0	
					Particulate Matter	0.0143	0.0628	0	
					PM < 2.5 micron	0.0143	0.0628	0	
					PM < 10 micron	0.0143	0.0628	0	
					Polycyclic organic matter	1.66e-07	7.29e-07	0	
					Selenium compounds	4.53e-08	1.98e-07	0	
					Sulfur Dioxide	0.00113	0.00496	0	
					Toluene	6.42e-06	2.81e-05	0	
					Volatile Organic Compounds	0.0104	0.0454	0	
		EQUI 39	Null	Line 3 Touch-up Booth Air Make-up	1,4-Dichlorobenzene (para-)	4.66e-06	2.04e-05	0	
					Arsenic compounds	7.76e-07	3.4e-06	0	
					Benzene	8.15e-06	3.57e-05	0	
					Beryllium Compounds	4.66e-08	2.04e-07	0	
					Cadmium compounds	4.27e-06	1.87e-05	0	
					Carbon Dioxide	466	2,040	0	
					Carbon Dioxide Equivalent	469	2,050	0	
					Carbon Monoxide	0.326	1.43	0	
					Chromium compounds	5.44e-06	2.38e-05	0	
					Cobalt compounds	3.26e-07	1.43e-06	0	
					Formaldehyde	0.000291	0.00128	0	
					HAPs - Total	0.00733	0.0321	0	
					Hexane	0.00699	0.0306	0	
					Lead Compounds	1.94e-06	8.5e-06	0	
					Manganese compounds	1.48e-06	6.46e-06	0	
					Mercury Compounds	1.01e-06	4.42e-06	0	
					Methane	0.00893	0.0391	0	
					Naphthalene	2.37e-06	1.04e-05	0	
					Nickel compounds	8.15e-06	3.57e-05	0	
					Nitrogen Oxides	0.388	1.7	0	
					Nitrous Oxide	0.00854	0.0374	0	
					Particulate Matter	0.0295	0.129	0	
					PM < 2.5 micron	0.0295	0.129	0	
					PM < 10 micron	0.0295	0.129	0	
					Polycyclic organic matter	3.42e-07	1.5e-06	0	
					Selenium compounds	9.32e-08	4.08e-07	0	
					Sulfur Dioxide	0.00233	0.0102	0	
					Toluene	1.32e-05	5.78e-05	0	
					Volatile Organic Compounds	0.0213	0.0935	0	
		EQUI 41	Null	Line 4 Paint Booth Air Make-up	1,4-Dichlorobenzene (para-)	2.26e-06	9.92e-06	0	
					Arsenic compounds	3.77e-07	1.65e-06	0	
					Benzene	3.96e-06	1.74e-05	0	
					Beryllium Compounds	2.26e-08	9.92e-08	0	
					Cadmium compounds	2.08e-06	9.09e-06	0	
					Carbon Dioxide	226	992	0	
					Carbon Dioxide Equivalent	228	998	0	
					Carbon Monoxide	0.159	0.694	0	
					Chromium compounds	2.64e-06	1.16e-05	0	
					Cobalt compounds	1.59e-07	6.94e-07	0	
					Formaldehyde	0.000142	0.00062	0	
					HAPs - Total	0.00356	0.0156	0	
					Hexane	0.0034	0.0149	0	
					Lead Compounds	9.44e-07	4.13e-06	0	
					Manganese compounds	7.17e-07	3.14e-06	0	
					Mercury Compounds	4.91e-07	2.15e-06	0	
					Methane	0.00434	0.019	0	
					Naphthalene	1.15e-06	5.04e-06	0	
					Nickel compounds	3.96e-06	1.74e-05	0	
					Nitrogen Oxides	0.189	0.826	0	
					Nitrous Oxide	0.00415	0.0182	0	
					Particulate Matter	0.0143	0.0628	0	
					PM < 2.5 micron	0.0143	0.0628	0	
					PM < 10 micron	0.0143	0.0628	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Other Combustion	EQUI 41	Null	Line 4 Paint Booth Air Make-up	Polycyclic organic matter	1.66e-07	7.29e-07	0	
					Selenium compounds	4.53e-08	1.98e-07	0	
					Sulfur Dioxide	0.00113	0.00496	0	
					Toluene	6.42e-06	2.81e-05	0	
					Volatile Organic Compounds	0.0104	0.0454	0	
		EQUI 42	Null	Line 4 Touch-up Booth Air Make-up	1,4-Dichlorobenzene (para-)	4.66e-06	2.04e-05	0	
					Arsenic compounds	7.76e-07	3.4e-06	0	
					Benzene	8.15e-06	3.57e-05	0	
					Beryllium Compounds	4.66e-08	2.04e-07	0	
					Cadmium compounds	4.27e-06	1.87e-05	0	
					Carbon Dioxide	466	2,040	0	
					Carbon Dioxide Equivalent	469	2,050	0	
					Carbon Monoxide	0.326	1.43	0	
					Chromium compounds	5.44e-06	2.38e-05	0	
					Cobalt compounds	3.26e-07	1.43e-06	0	
					Formaldehyde	0.000291	0.00128	0	
					HAPs - Total	0.00733	0.0321	0	
					Hexane	0.00699	0.0306	0	
					Lead Compounds	1.94e-06	8.5e-06	0	
					Manganese compounds	1.48e-06	6.46e-06	0	
					Mercury Compounds	1.01e-06	4.42e-06	0	
					Methane	0.00893	0.0391	0	
					Naphthalene	2.37e-06	1.04e-05	0	
					Nickel compounds	8.15e-06	3.57e-05	0	
					Nitrogen Oxides	0.388	1.7	0	
					Nitrous Oxide	0.00854	0.0374	0	
					Particulate Matter	0.0295	0.129	0	
					PM < 2.5 micron	0.0295	0.129	0	
					PM < 10 micron	0.0295	0.129	0	
					Polycyclic organic matter	3.42e-07	1.5e-06	0	
					Selenium compounds	9.32e-08	4.08e-07	0	
					Sulfur Dioxide	0.00233	0.0102	0	
					Toluene	1.32e-05	5.78e-05	0	
					Volatile Organic Compounds	0.0213	0.0935	0	
		EQUI 44	Null	Line 5 Paint Booth Air Make-up	1,4-Dichlorobenzene (para-)	2.59e-06	1.13e-05	0	
					Arsenic compounds	4.31e-07	1.89e-06	0	
					Benzene	4.53e-06	1.98e-05	0	
					Beryllium Compounds	2.59e-08	1.13e-07	0	
					Cadmium compounds	2.37e-06	1.04e-05	0	
					Carbon Dioxide	259	1,130	0	
					Carbon Dioxide Equivalent	260	1,140	0	
					Carbon Monoxide	0.181	0.794	0	
					Chromium compounds	3.02e-06	1.32e-05	0	
					Cobalt compounds	1.81e-07	7.94e-07	0	
					Formaldehyde	0.000162	0.000709	0	
					HAPs - Total	0.00407	0.0178	0	
					Hexane	0.00388	0.017	0	
					Lead Compounds	1.08e-06	4.72e-06	0	
					Manganese compounds	8.2e-07	3.59e-06	0	
					Mercury Compounds	5.61e-07	2.46e-06	0	
					Methane	0.00496	0.0217	0	
					Naphthalene	1.3156e-06	5.762328e-06	0	
					Nickel compounds	4.53e-06	1.98e-05	0	
					Nitrogen Oxides	0.216	0.944	0	
					Nitrous Oxide	0.00475	0.0208	0	
					Particulate Matter	0.0164	0.0718	0	
					PM < 2.5 micron	0.0164	0.0718	0	
					PM < 10 micron	0.0164	0.0718	0	
					Polycyclic organic matter	1.9e-07	8.33e-07	0	
					Selenium compounds	5.18e-08	2.27e-07	0	
					Sulfur Dioxide	0.00129	0.00567	0	
					Toluene	7.33e-06	3.21e-05	0	
					Volatile Organic Compounds	0.0119	0.0519	0	
		EQUI 45	Null	Line 5 Touch-up Booth Air Make-up	1,4-Dichlorobenzene (para-)	4.66e-06	2.04e-05	0	
					Arsenic compounds	7.76e-07	3.4e-06	0	
					Benzene	8.15e-06	3.57e-05	0	
					Beryllium Compounds	4.66e-08	2.04e-07	0	
					Cadmium compounds	4.27e-06	1.87e-05	0	
					Carbon Dioxide	466	2,040	0	
					Carbon Dioxide Equivalent	469	2,050	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Other Combustion	EQUI 45	Null	Line 5 Touch-up Booth Air Make-up	Carbon Monoxide	0.326	1.43	0	
					Chromium compounds	5.44e-06	2.38e-05	0	
					Cobalt compounds	3.26e-07	1.43e-06	0	
					Formaldehyde	0.000291	0.00128	0	
					HAPs - Total	0.00733	0.0321	0	
					Hexane	0.00699	0.0306	0	
					Lead Compounds	1.94e-06	8.5e-06	0	
					Manganese compounds	1.48e-06	6.46e-06	0	
					Mercury Compounds	1.01e-06	4.42e-06	0	
					Methane	0.00893	0.0391	0	
					Naphthalene	2.37e-06	1.04e-05	0	
					Nickel compounds	8.15e-06	3.57e-05	0	
					Nitrogen Oxides	0.388	1.7	0	
					Nitrous Oxide	0.00854	0.0374	0	
					Particulate Matter	0.0295	0.129	0	
					PM < 2.5 micron	0.0295	0.129	0	
					PM < 10 micron	0.0295	0.129	0	
					Polycyclic organic matter	3.42e-07	1.5e-06	0	
					Selenium compounds	9.32e-08	4.08e-07	0	
					Sulfur Dioxide	0.00233	0.0102	0	
					Toluene	1.32e-05	5.78e-05	0	
					Volatile Organic Compounds	0.0213	0.0935	0	
		EQUI 46	Null	Line 6 Paint & Touch-up Booth Air Make-up	1,4-Dichlorobenzene (para-)	5.12e-06	2.24e-05	0	
					Arsenic compounds	8.54e-07	3.74e-06	0	
					Benzene	8.97e-06	3.93e-05	0	
					Beryllium Compounds	5.12e-08	2.24e-07	0	
					Cadmium compounds	4.7e-06	2.06e-05	0	
					Carbon Dioxide	512	2,240	0	
					Carbon Dioxide Equivalent	516	2,260	0	
					Carbon Monoxide	0.359	1.57	0	
					Chromium compounds	5.98e-06	2.62e-05	0	
					Cobalt compounds	3.59e-07	1.57e-06	0	
					Formaldehyde	0.00032	0.0014	0	
					HAPs - Total	0.00806	0.0353	0	
					Hexane	0.00769	0.0337	0	
					Lead Compounds	2.14e-06	9.35e-06	0	
					Manganese compounds	1.62e-06	7.11e-06	0	
					Mercury Compounds	1.11e-06	4.86e-06	0	
					Methane	0.00982	0.043	0	
					Naphthalene	2.61e-06	1.14e-05	0	
					Nickel compounds	8.97e-06	3.93e-05	0	
					Nitrogen Oxides	0.427	1.87	0	
					Nitrous Oxide	0.0094	0.0412	0	
					Particulate Matter	0.0325	0.142	0	
					PM < 2.5 micron	0.0325	0.142	0	
					PM < 10 micron	0.0325	0.142	0	
					Polycyclic organic matter	3.77e-07	1.65e-06	0	
					Selenium compounds	1.02e-07	4.49e-07	0	
					Sulfur Dioxide	0.00256	0.0112	0	
					Toluene	1.45e-05	6.36e-05	0	
					Volatile Organic Compounds	0.0235	0.103	0	
		EQUI 62	Null	Various Small Capacity Heaters	1,4-Dichlorobenzene (para-)	8.36e-05	0.000366	0	
					Arsenic compounds	1.39e-05	6.11e-05	0	
					Benzene	0.000146	0.000641	0	
					Beryllium Compounds	8.36e-07	3.66e-06	0	
					Cadmium compounds	7.67e-05	0.000336	0	
					Carbon Dioxide	8,360	36,600	0	
					Carbon Dioxide Equivalent	8,410	36,900	0	
					Carbon Monoxide	5.86	25.6	0	
					Chromium compounds	9.76e-05	0.000427	0	
					Cobalt compounds	5.86e-06	2.56e-05	0	
					Formaldehyde	0.00523	0.0229	0	
					HAPs - Total	0.132	0.577	0	
					Hexane	0.125	0.55	0	
					Lead Compounds	3.49e-05	0.000153	0	
					Manganese compounds	2.65e-05	0.000116	0	
					Mercury Compounds	1.81e-05	7.94e-05	0	
					Methane	0.16	0.702	0	
					Naphthalene	4.25e-05	0.000186	0	
					Nickel compounds	0.000146	0.000641	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Other Combustion	EQUI 62	Null	Various Small Capacity Heaters	Nitrogen Oxides	6.97	30.5	0	
					Nitrous Oxide	0.153	0.672	0	
					Particulate Matter	0.53	2.32	0	
					PM < 2.5 micron	0.53	2.32	0	
					PM < 10 micron	0.53	2.32	0	
					Polycyclic organic matter	6.15e-06	2.69e-05	0	
					Selenium compounds	1.67e-06	7.33e-06	0	
					Sulfur Dioxide	0.0418	0.183	0	
					Toluene	0.000237	0.00104	0	
					Volatile Organic Compounds	0.383	1.68	0	
	Other Emission Unit	EQUI 87	Null	Blast Booth Monorail	Particulate Matter	0.812	3.56	3.56	
					PM < 2.5 micron	0.391	0.171	0.171	
					PM < 10 micron	0.391	1.71	1.71	
	Reciprocating IC Engine	EQUI 72	Null	MFG Offices Emergency Generator	1,1,2-Trichloroethane	2e-05	5.01e-06	0	
					1,1,2,2-Tetrachloroethane	3.31e-05	8.29e-06	0	
					1,2-Dibromoethane (Ethylene dibromide); EDB	2.79e-05	6.98e-06	0	
					1,3-Butadiene	0.000869	0.000217	0	
					1,3-Dichloropropene	1.66e-05	4.16e-06	0	
					Acetaldehyde	0.00365	0.000914	0	
					Acrolein	0.00345	0.000861	0	
					Benzene	0.00207	0.000517	0	
					Carbon Dioxide	144	36	0	
					Carbon Dioxide Equivalent	144	36.1	0	
					Carbon Monoxide	1.36	0.34	0	
					Carbon tetrachloride	2.32e-05	5.8e-06	0	
					Chlorobenzene (Monochlorobenzene)	1.69e-05	4.22e-06	0	
					Chloroform	1.79e-05	4.49e-06	0	
					Dichloromethane (Methylene chloride)	5.4e-05	1.35e-05	0	
					Ethylbenzene	3.25e-05	8.12e-06	0	
					Formaldehyde	0.0269	0.00671	0	
					HAPs - Total	0.0385	0.00961	0	
					Methane	0.00289	0.000722	0	
					Naphthalene	0.000127	3.18e-05	0	
					Nitrogen Oxides	0.679	0.17	0	
					Nitrous Oxide	0.000289	7.22e-05	0	
					Particulate Matter	0.0254	0.00636	0	
					PM < 2.5 micron	0.0254	0.00636	0	
					PM < 10 micron	0.0254	0.00636	0	
					Polycyclic organic matter	0.000185	4.62e-05	0	
					Styrene	1.56e-05	3.9e-06	0	
					Sulfur Dioxide	0.00077	0.000193	0	
					Toluene	0.000731	0.000183	0	
					Vinyl chloride (chloroethene)	9.41e-06	2.35e-06	0	
					Volatile Organic Compounds	0.34	0.0849	0	
					Xylenes, Total	0.000255	6.39e-05	0	
		EQUI 89	Null	JPDI Emergency Generator	1,1,2-Trichloroethane	1.97e-05	4.93e-06	0	
					1,1,2,2-Tetrachloroethane	3.26e-05	8.16e-06	0	
					1,2-Dibromoethane (Ethylene dibromide); EDB	2.75e-05	6.87e-06	0	
					1,3-Butadiene	0.000855	0.000214	0	
					1,3-Dichloropropene	1.64e-05	4.1e-06	0	
					Acetaldehyde	0.0036	0.0009	0	
					Acrolein	0.00339	0.000848	0	
					Benzene	0.00204	0.00051	0	
					Carbon Dioxide	142	35.5	0	
					Carbon Dioxide Equivalent	142	35.5	0	
					Carbon Monoxide	1.63	0.406	0	
					Carbon tetrachloride	2.28e-05	5.71e-06	0	
					Chlorobenzene (Monochlorobenzene)	1.66e-05	4.16e-06	0	
					Chloroform	1.77e-05	4.42e-06	0	
					Dichloromethane (Methylene chloride)	5.31e-05	1.33e-05	0	
					Ethylbenzene	3.2e-05	8e-06	0	
					Formaldehyde	0.0264	0.00661	0	
					HAPs - Total	0.0379	0.00947	0	
					Methane	0.00284	0.000711	0	
					Naphthalene	0.000125	3.13e-05	0	
					Nitrogen Oxides	0.813	0.203	0	
					Nitrous Oxide	0.000284	7.11e-05	0	
					Particulate Matter	0.025	0.00626	0	
					PM < 2.5 micron	0.025	0.00626	0	
					PM < 10 micron	0.025	0.00626	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Reciprocating IC Engine	EQUI 89	Null	JPDI Emergency Generator	Polycyclic organic matter	0.000182	4.55e-05	0	
					Styrene	1.56e-05	3.9e-06	0	
					Sulfur Dioxide	0.000759	0.00019	0	
					Toluene	0.00072	0.00018	0	
					Vinyl chloride (chloroethene)	9.41e-06	2.35e-06	0	
					Volatile Organic Compounds	0.406	0.102	0	
					Xylenes, Total	0.000252	6.29e-05	0	
		EQUI 90	Null	HR Emergency Generator	1,1,2-Trichloroethane	2e-05	5.01e-06	0	
					1,1,2,2-Tetrachloroethane	3.31e-05	8.29e-06	0	
					1,2-Dibromoethane (Ethylene dibromide); EDB	2.79e-05	6.98e-06	0	
					1,3-Butadiene	0.000869	0.000217	0	
					1,3-Dichloropropene	1.66e-05	4.16e-06	0	
					Acetaldehyde	0.00365	0.000914	0	
					Acrolein	0.00345	0.000861	0	
					Benzene	0.00207	0.000517	0	
					Carbon Dioxide	144	36	0	
					Carbon Dioxide Equivalent	144	36.1	0	
					Carbon Monoxide	1.36	0.34	0	
					Carbon tetrachloride	2.32e-05	5.8e-06	0	
					Chlorobenzene (Monochlorobenzene)	1.69e-05	4.22e-06	0	
					Chloroform	1.79e-05	4.49e-06	0	
					Dichloromethane (Methylene chloride)	5.4e-05	1.35e-05	0	
					Ethylbenzene	3.25e-05	8.12e-06	0	
					Formaldehyde	0.0269	0.00671	0	
					HAPs - Total	0.0385	0.00961	0	
					Methane	0.00289	0.000722	0	
					Naphthalene	0.000127	3.18e-05	0	
					Nitrogen Oxides	0.679	0.17	0	
					Nitrous Oxide	0.000289	7.22e-05	0	
					Particulate Matter	0.0254	0.00636	0	
					PM < 2.5 micron	0.0254	0.00636	0	
					PM < 10 micron	0.0254	0.00636	0	
					Polycyclic organic matter	0.000185	4.62e-05	0	
					Styrene	1.54e-05	3.84e-06	0	
					Sulfur Dioxide	0.00077	0.000193	0	
					Toluene	0.000731	0.000183	0	
					Vinyl chloride (chloroethene)	9.26e-06	2.32e-06	0	
					Volatile Organic Compounds	0.34	0.0849	0	
					Xylenes, Total	0.000255	6.39e-05	0	
	Spray Booth/Coating Line	EQUI 1	EU026	Refuse Line Paint Booth	Cumene (Isopropylbenzene)	0.5	2.19	0	
					Ethylbenzene	1.29	5.66	0	
					Formaldehyde	0.0428	0.188	0	
					Glycol ethers	27.7	121	0	
					HAPs - Total	45.5	199	0	
					Hexamethylene-1,6-diisocyanate	0.101	0.444	0	
					Methanol	0.0856	0.375	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	9.96	43.6	0	
					Particulate Matter	6.6	193	0	
					PM < 2.5 micron	6.6	193	0	
					PM < 10 micron	6.6	193	0	
					Toluene	0.123	0.541	0	
					Volatile Organic Compounds	114	499	0	
					Xylenes, Total	5.65	24.8	0	
		EQUI 2	EU027	Line 6 Paint & Touch-up Booth	Cumene (Isopropylbenzene)	0.5	2.19	0	
					Ethylbenzene	1.29	5.66	0	
					Formaldehyde	0.0428	0.188	0	
					Glycol ethers	27.7	121	0	
					HAPs - Total	45.5	199	0	
					Hexamethylene-1,6-diisocyanate	0.101	0.444	0	
					Methanol	0.0856	0.375	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	9.96	43.6	0	
					Particulate Matter	6.6	193	0	
					PM < 2.5 micron	6.6	193	0	
					PM < 10 micron	6.6	193	0	
					Toluene	0.123	0.541	0	
					Volatile Organic Compounds	114	499	0	
					Xylenes, Total	5.65	24.8	0	
		EQUI 4	EU029	High Flow Line Paint & Prime Booth	Cumene (Isopropylbenzene)	0.0936	0.41	0	
					Ethylbenzene	0.242	1.06	0	
					Formaldehyde	0.00802	0.0351	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Spray Booth/Coating Line	EQUI 4	EU029	High Flow Line Paint & Prime Booth	Glycol ethers	5.19	22.7	0	
					HAPs - Total	8.52	37.3	0	
					Hexamethylene-1,6-diisocyanate	0.019	0.0831	0	
					Methanol	0.016	0.0702	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	1.87	8.17	0	
					Particulate Matter	1.24	36.1	0	
					PM < 2.5 micron	1.24	36.1	0	
					PM < 10 micron	1.24	36.1	0	
					Toluene	0.0231	0.101	0	
					Volatile Organic Compounds	21.3	93.3	0	
					Xylenes, Total	1.06	4.64	0	
		EQUI 14	EU011	Line 4 Paint Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	
					Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 15	EU013	Line 5 Paint Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	
					Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 17	EU017	Refuse Line Prime Booth	Cumene (Isopropylbenzene)	1	4.38	0	
					Ethylbenzene	2.58	11.3	0	
					Formaldehyde	0.0856	0.375	0	
					Glycol ethers	55.4	243	0	
					HAPs - Total	91	398	0	
					Hexamethylene-1,6-diisocyanate	0.203	0.888	0	
					Methanol	0.171	0.75	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	19.9	87.3	0	
					Particulate Matter	1.98	386	0	
					PM < 2.5 micron	1.98	386	0	
					PM < 10 micron	1.98	386	0	
					Toluene	0.247	1.08	0	
					Volatile Organic Compounds	228	997	0	
					Xylenes, Total	11.3	49.5	0	
		EQUI 28	EU009	Line 3 Paint Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	
					Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 37	Null	Line 3 Touch-up Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Spray Booth/Coating Line	EQUI 37	Null	Line 3 Touch-up Booth	Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 40	Null	Line 4 Touch-up Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	
					Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 43	Null	Line 5 Touch-up Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	
					Glycol ethers	370	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 70	Null	Monorail Small Parts Booth	Cumene (Isopropylbenzene)	0.00222	0.00973	0	
					Ethylbenzene	0.00574	0.0251	0	
					Formaldehyde	0.00019	0.000834	0	
					Glycol ethers	0.123	0.54	0	
					HAPs - Total	0.202	0.885	0	
					Hexamethylene-1,6-diisocyanate	0.00045	0.00197	0	
					Methanol	0.000381	0.00167	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	0.0443	0.194	0	
					Particulate Matter	0.196	0.857	0	
					PM < 2.5 micron	0.196	0.857	0	
					PM < 10 micron	0.196	0.857	0	
					Toluene	0.000549	0.0024	0	
					Volatile Organic Compounds	0.506	2.22	0	
					Xylenes, Total	0.0251	0.11	0	
		EQUI 73	Null	Monorail Prime Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	
					Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 75	Null	Monorail Topcoat Booth	Cumene (Isopropylbenzene)	0.667	2.92	0	
					Ethylbenzene	1.72	7.54	0	
					Formaldehyde	0.0571	0.25	0	

PTE by SI

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Pollutant	Potential (lbs/hr)	Unrestricted Potential (tons/yr)	Potential Limited (tons/yr)	Actual Emissions (tons/yr)
Equipment	Spray Booth/Coating Line	EQUI 75	Null	Monorail Topcoat Booth	Glycol ethers	37	162	0	
					HAPs - Total	60.6	266	0	
					Hexamethylene-1,6-diisocyanate	0.135	0.592	0	
					Methanol	0.114	0.5	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	13.3	58.2	0	
					Particulate Matter	8.8	257	0	
					PM < 2.5 micron	8.8	257	0	
					PM < 10 micron	8.8	257	0	
					Toluene	0.165	0.721	0	
					Volatile Organic Compounds	152	665	0	
					Xylenes, Total	7.54	33	0	
		EQUI 80	Null	Side Loader Paint Booth	Cumene (Isopropylbenzene)	0.722	3.16	0	
					Ethylbenzene	1.87	8.17	0	
					Formaldehyde	0.0619	0.271	0	
					Glycol ethers	40	175	0	
					HAPs - Total	65.7	288	0	
					Hexamethylene-1,6-diisocyanate	0.146	0.641	0	
					Methanol	0.124	0.542	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	14.4	63	0	
					Particulate Matter	0.215	279	0	
					PM < 2.5 micron	0.215	279	0	
					PM < 10 micron	0.215	279	0	
					Toluene	0.178	0.781	0	
					Volatile Organic Compounds	164	720	0	
					Xylenes, Total	8.17	35.8	0	
		EQUI 82	Null	Side Loader Prime Booth	Cumene (Isopropylbenzene)	0.722	3.16	0	
					Ethylbenzene	1.87	8.17	0	
					Formaldehyde	0.0619	0.271	0	
					Glycol ethers	40	175	0	
					HAPs - Total	65.7	288	0	
					Hexamethylene-1,6-diisocyanate	0.146	0.641	0	
					Methanol	0.124	0.542	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	14.4	63	0	
					Particulate Matter	0.215	279	0	
					PM < 2.5 micron	0.215	279	0	
					PM < 10 micron	0.215	279	0	
					Toluene	0.178	0.781	0	
					Volatile Organic Compounds	164	720	0	
					Xylenes, Total	8.17	35.8	0	
		EQUI 84	Null	Side Loader Clear Coat Booth	Cumene (Isopropylbenzene)	0.722	3.16	0	
					Ethylbenzene	1.87	8.17	0	
					Formaldehyde	0.0619	0.271	0	
					Glycol ethers	40	175	0	
					HAPs - Total	65.7	288	0	
					Hexamethylene-1,6-diisocyanate	0.146	0.641	0	
					Methanol	0.124	0.542	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	14.4	63	0	
					Particulate Matter	0.215	279	0	
					PM < 2.5 micron	0.215	279	0	
					PM < 10 micron	0.215	279	0	
					Toluene	0.178	0.781	0	
					Volatile Organic Compounds	164	720	0	
					Xylenes, Total	8.17	35.8	0	
	Spraying Equipment	EQUI 26	EU007	Large Parts Prime & Paint	Cumene (Isopropylbenzene)	0.5	2.19	0	
					Ethylbenzene	1.29	5.66	0	
					Formaldehyde	0.0428	0.188	0	
					Glycol ethers	27.7	121	0	
					HAPs - Total	45.5	199	0	
					Hexamethylene-1,6-diisocyanate	0.101	0.444	0	
					Methanol	0.0856	0.375	0	
					Methyl isobutyl ketone (4-Methyl-2-pentanone)	9.96	4.36	0	
					Particulate Matter	6.6	193	0	
					PM < 2.5 micron	6.6	193	0	
					PM < 10 micron	6.6	193	0	
					Toluene	0.123	0.541	0	
					Volatile Organic Compounds	114	499	0	
					Xylenes, Total	5.65	24.8	0	

Relationships

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Relationship	Related SI ID	% Flow	Related SI Type	Related Delta Designation	Relationship Start Date	Relationship End Date	
Equipment	Dryer/Oven, indirect fired	EQUI 58	EU032	High Flow Line Oven	sends to	STRU 65	100	Stack/Vent	SV065	3/1/2017	Null	
		EQUI 59	EU033	Line 6 Curing Oven (MUA 85)	sends to	STRU 61	50	Stack/Vent	SV061	3/1/2017	Null	
		EQUI 71	Null	Burn Off Oven	sends to	STRU 86	100	Stack/Vent	Null	6/26/2025	Null	
		EQUI 77	Null	Monorail Curing Oven	sends to	STRU 91	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 92	50	Stack/Vent	Null	4/1/2023	Null	
		EQUI 86	Null	Side Loader Curing Oven	sends to	STRU 101	100	Stack/Vent	Null	4/1/2023	Null	
		EQUI 91	EU018	Refuse Line Curing Oven	sends to	STRU 31	33.3	Stack/Vent	SV027	3/8/2000	Null	
						STRU 32	33.3	Stack/Vent	SV028	3/8/2000	Null	
						STRU 33	33.3	Stack/Vent	SV029	3/8/2000	Null	
		EQUI 92	EU021	Large Parts Curing Oven	sends to	STRU 53	50	Stack/Vent	SV052	3/8/2000	Null	
						STRU 54	50	Stack/Vent	SV053	3/8/2000	Null	
		EQUI 93	EU010	Lines 3-5 Curing Oven	sends to	STRU 17	100	Stack/Vent	SV013	1/1/1970	Null	
	Furnace	EQUI 74	Null	Monorail Topcoat Booth Air Make-up (MAU 97)	sends to	STRU 87	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 88	50	Stack/Vent	Null	4/1/2023	Null	
		EQUI 76	Null	Monorail Prime Booth Air Make-up (MUA 94)	sends to	STRU 89	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 90	50	Stack/Vent	Null	4/1/2023	Null	
		EQUI 81	Null	Side Loader Paint Booth Air Make-Up (MAU 64)	sends to	STRU 95	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 96	50	Stack/Vent	Null	4/1/2023	Null	
		EQUI 83	Null	Side Loader Prime Booth Air Make-up	sends to	STRU 97	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 98	50	Stack/Vent	Null	4/1/2023	Null	
		EQUI 85	Null	Side Loader Clear Coat Booth Air Make-Up	sends to	STRU 99	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 100	50	Stack/Vent	Null	4/1/2023	Null	
	Other Combustion	EQUI 32	Null	Large Parts Prime & Paint Air Make-up	sends to	STRU 8	100	Stack/Vent	SV004	1/1/1970	Null	
		EQUI 33	Null	Refuse Line Prime Booth Air Make-up	sends to	STRU 27	50	Stack/Vent	SV023	1/1/1970	Null	
						STRU 30	50	Stack/Vent	SV026	1/1/1970	Null	
		EQUI 36	Null	High Flow Line Air Make-Up	sends to	STRU 67	100	Stack/Vent	SV067	3/1/2017	Null	
		EQUI 38	Null	Line 3 Paint Booth Air Make-up	sends to	STRU 13	50	Stack/Vent	SV009	1/1/1970	Null	
						STRU 14	50	Stack/Vent	SV010	1/1/1970	Null	
		EQUI 39	Null	Line 3 Touch-up Booth Air Make-up	sends to	STRU 15	50	Stack/Vent	SV011	1/1/1970	Null	
						STRU 16	50	Stack/Vent	SV012	1/1/1970	Null	
		EQUI 41	Null	Line 4 Paint Booth Air Make-up	sends to	STRU 18	50	Stack/Vent	SV014	1/1/1970	Null	
						STRU 19	50	Stack/Vent	SV015	1/1/1970	Null	
		EQUI 42	Null	Line 4 Touch-up Booth Air Make-up	sends to	STRU 20	50	Stack/Vent	SV016	1/1/1970	Null	
						STRU 21	50	Stack/Vent	SV017	1/1/1970	Null	
		EQUI 44	Null	Line 5 Paint Booth Air Make-up	sends to	STRU 22	50	Stack/Vent	SV018	1/1/1970	Null	
						STRU 23	50	Stack/Vent	SV019	1/1/1970	Null	
		EQUI 45	Null	Line 5 Touch-up Booth Air Make-up	sends to	STRU 24	50	Stack/Vent	SV020	1/1/1970	Null	
						STRU 25	50	Stack/Vent	SV021	1/1/1970	Null	
		EQUI 46	Null	Line 6 Paint & Touch-up Booth Air Make-up	sends to	STRU 57	50	Stack/Vent	SV057	7/2/2011	Null	

Relationships

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category Equipment	SI Type	Subject Item ID	Delta Designation	Description	Relationship	Related SI ID	% Flow	Related SI Type	Related Delta Designation	Relationship Start Date	Relationship End Date	
	Other Combustion	EQUI 46	Null	Line 6 Paint & Touch-up Booth Air Make-up	sends to	STRU 58	50	Stack/Vent	SV058	7/2/2011	Null	
	Other Emission Unit	EQUI 87	Null	Blast Booth Monorail	sends to	STRU 102	100	Stack/Vent	Null	4/1/2023	Null	
	Spray Booth/Coating Line	EQUI 1	EU026	Refuse Line Paint Booth	is controlled by	TREA 1	100	058-Mat or Panel Filter	CE026	7/3/2005	Null	
					sends to	STRU 28	50	Stack/Vent	SV024	7/3/2005	Null	
						STRU 29	50	Stack/Vent	SV025	7/3/2005	Null	
		EQUI 2	EU027	Line 6 Paint & Touch-up Booth	is controlled by	TREA 2	100	058-Mat or Panel Filter	CE027	7/2/2011	Null	
					sends to	STRU 57	50	Stack/Vent	SV057	7/2/2011	Null	
						STRU 58	50	Stack/Vent	SV058	7/2/2011	Null	
		EQUI 4	EU029	High Flow Line Paint & Prime Booth	is controlled by	TREA 4	100	058-Mat or Panel Filter	CE029	3/1/2017	Null	
					sends to	STRU 67	100	Stack/Vent	SV067	3/1/2017	Null	
		EQUI 14	EU011	Line 4 Paint Booth	is controlled by	TREA 16	100	058-Mat or Panel Filter	CE011	1/1/1970	Null	
					sends to	STRU 18	50	Stack/Vent	SV014	1/1/1970	Null	
						STRU 19	50	Stack/Vent	SV015	1/1/1970	Null	
		EQUI 15	EU013	Line 5 Paint Booth	is controlled by	TREA 17	100	058-Mat or Panel Filter	CE013	1/1/1970	Null	
					sends to	STRU 22	50	Stack/Vent	SV018	1/1/1970	Null	
						STRU 23	50	Stack/Vent	SV019	1/1/1970	Null	
		EQUI 17	EU017	Refuse Line Prime Booth	is controlled by	TREA 18	100	058-Mat or Panel Filter	CE017	1/1/1970	Null	
						TREA 41	0	058-Mat or Panel Filter	Null	1/1/1970	Null	
					sends to	STRU 27	50	Stack/Vent	SV023	1/1/1970	Null	
						STRU 30	50	Stack/Vent	SV026	1/1/1970	Null	
		EQUI 28	EU009	Line 3 Paint Booth	is controlled by	TREA 14	100	058-Mat or Panel Filter	CE009	1/1/1970	Null	
					sends to	STRU 13	50	Stack/Vent	SV009	1/1/1970	Null	
						STRU 14	50	Stack/Vent	SV010	1/1/1970	Null	
		EQUI 37	Null	Line 3 Touch-up Booth	is controlled by	TREA 30	100	058-Mat or Panel Filter	CE009	1/1/1970	Null	
					sends to	STRU 15	50	Stack/Vent	SV011	1/1/1970	Null	
						STRU 16	50	Stack/Vent	SV012	1/1/1970	Null	
		EQUI 40	Null	Line 4 Touch-up Booth	is controlled by	TREA 31	100	058-Mat or Panel Filter	CE011	1/1/1970	Null	
					sends to	STRU 20	50	Stack/Vent	SV016	1/1/1970	Null	
						STRU 21	50	Stack/Vent	SV017	1/1/1970	Null	
		EQUI 43	Null	Line 5 Touch-up Booth	is controlled by	TREA 32	100	058-Mat or Panel Filter	CE013	1/1/1970	Null	
					sends to	STRU 24	50	Stack/Vent	SV020	1/1/1970	Null	
						STRU 25	50	Stack/Vent	SV021	1/1/1970	Null	
		EQUI 73	Null	Monorail Prime Booth	is controlled by	TREA 35	100	058-Mat or Panel Filter	Null	4/1/2023	Null	
					sends to	STRU 89	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 90	50	Stack/Vent	Null	4/1/2023	Null	
		EQUI 75	Null	Monorail Topcoat Booth	is controlled by	TREA 36	100	058-Mat or Panel Filter	Null	4/1/2023	Null	
					sends to	STRU 87	50	Stack/Vent	Null	4/1/2023	Null	
						STRU 88	50	Stack/Vent	Null	4/1/2023	Null	
	EQUI 80	Null		Side Loader Paint Booth	is controlled by	TREA 39	100	058-Mat or Panel Filter	Null	7/1/2024	Null	

Relationships

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

SI Category	SI Type	Subject Item ID	Delta Designation	Description	Relationship	Related SI ID	% Flow	Related SI Type	Related Delta Designation	Relationship Start Date	Relationship End Date	
Equipment	Spray Booth/Coating Line	EQUI 80	Null	Side Loader Paint Booth	is controlled by	TREA 42	0	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 43	0	058-Mat or Panel Filter	Null	7/1/2024	Null	
					sends to	STRU 96	100	Stack/Vent	Null	7/1/2024	Null	
		EQUI 82	Null	Side Loader Prime Booth	is controlled by	TREA 38	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 44	0	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 45	0	058-Mat or Panel Filter	Null	7/1/2024	Null	
					sends to	STRU 97	100	Stack/Vent	Null	7/1/2024	Null	
		EQUI 84	Null	Side Loader Clear Coat Booth	is controlled by	TREA 40	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 46	0	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 47	0	058-Mat or Panel Filter	Null	7/1/2024	Null	
					sends to	STRU 99	50	Stack/Vent	Null	7/1/2024	Null	
						STRU 100	50	Stack/Vent	Null	7/1/2024	Null	
	Spraying Equipment	EQUI 26	EU007	Large Parts Prime & Paint	is controlled by	TREA 12	100	058-Mat or Panel Filter	CE007	1/1/1970	Null	
					sends to	STRU 8	100	Stack/Vent	SV004	1/1/1970	Null	
Treatment	058-Mat or Panel Filter	TREA 18	CE017	Refuse Line Prime Booth Panel Filter	is controlled by	TREA 41	100	058-Mat or Panel Filter	Null	1/1/1970	Null	
		TREA 38	Null	Side Loader Prime Booth Panel Filter	is controlled in series by	TREA 42	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 43	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
		TREA 39	Null	Side Loader Paint Booth Panel Filter	is controlled in series by	TREA 44	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 45	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
		TREA 40	Null	Side Loader Clear Coat Booth Panel Filter	is controlled in series by	TREA 46	100	058-Mat or Panel Filter	Null	7/1/2024	Null	
						TREA 47	100	058-Mat or Panel Filter	Null	7/1/2024	Null	

Building

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Height	Units (height)	Length	Units (length)	Width	Units (width)	
STRU 69	BG008	Aftermarket Parts Building	49.1	feet	295	feet	100	feet	
STRU 70	BG009	R&D Building	28.5	feet	209	feet	150	feet	
STRU 71	BG001	Manufacturing Building	29	feet	890	feet	707	feet	
STRU 72	BG002	Training/Old CP/Main Office	21.8	feet	561	feet	532	feet	
STRU 73	BG003	Final Paint Line 3,4,5&6 Building	21.7	feet	382	feet	107	feet	
STRU 74	BG004	Final Paint Line 1&2 Building	24	feet	400	feet	77	feet	
STRU 75	BG005	Inspection Building	21	feet	195	feet	100	feet	
STRU 76	BG006	Final Paint Line 3,4,5&6 Building	27.5	feet	100	feet	62	feet	
STRU 77	BG007	North Paint Building	25.6	feet	353	feet	76	feet	
STRU 84	Null	JPDI Building	28	feet	240	feet	120	feet	

Stack/Vents

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Stack Height (feet)	Stack Diameter (feet)	Stack Length (feet)	Stack Width (feet)	Stack Flow Rate (cubic ft/min)	Discharge Temperature (°F)	Flow Rate/Temp Information Source	Discharge Direction	
STRU 8	SV004	Large Parts Prime & Paint Air and Make-up	25.7	2.83	Null	Null	19,290	70	Estimate	Upwards with no cap on stack/vent	
STRU 13	SV009	Line 3 Paint Booth	23	2.5	Null	Null	38,500	70	Estimate	Upwards with no cap on stack/vent	
STRU 14	SV010	Line 3 Paint Booth	23	2.5	Null	Null	38,500	70	Estimate	Upwards with no cap on stack/vent	
STRU 15	SV011	Line 3 Touch-up Booth	25	2.5	Null	Null	18,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 16	SV012	Line 3 Touch-up Booth	25	2.5	Null	Null	18,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 17	SV013	Lines 3-5 Curing Oven	25	2	Null	Null	9,200	100	Estimate	Upwards with no cap on stack/vent	
STRU 18	SV014	Line 4 Paint Booth	25	2.5	Null	Null	38,500	70	Estimate	Upwards with no cap on stack/vent	
STRU 19	SV015	Line 4 Paint Booth	25	2.5	Null	Null	38,500	70	Estimate	Upwards with no cap on stack/vent	
STRU 20	SV016	Line 4 Touch-up Booth	25	2.5	Null	Null	18,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 21	SV017	Line 4 Touch-up Booth	25	2.5	Null	Null	18,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 22	SV018	Line 5 Paint Booth	28	2.5	Null	Null	44,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 23	SV019	Line 5 Paint Booth	28	2.5	Null	Null	44,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 24	SV020	Line 5 Touch-up Booth	28	2.5	Null	Null	18,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 25	SV021	Line 5 Touch-up Booth	28	2.5	Null	Null	18,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 27	SV023	Refuse Line Prime Booth	30.5	2.5	Null	Null	10,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 28	SV024	Refuse Line Paint Booth	30.5	2.5	Null	Null	10,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 29	SV025	Refuse Line Paint Booth	30.5	2.5	Null	Null	10,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 30	SV026	Refuse Line Prime Booth	30.5	2.5	Null	Null	10,000	70	Estimate	Upwards with no cap on stack/vent	
STRU 31	SV027	Refuse Line Curing Oven	32.5	1.33	Null	Null	4,667	100	Estimate	Upwards with no cap on stack/vent	
STRU 32	SV028	Refuse Line Curing Oven	32.5	1.33	Null	Null	4,667	100	Estimate	Upwards with no cap on stack/vent	
STRU 33	SV029	Refuse Line Curing Oven	32.5	1.33	Null	Null	4,667	100	Estimate	Upwards with no cap on stack/vent	
STRU 53	SV052	Large Parts Curing Oven	30.5	1	Null	Null	1,800	100	Estimate	Upwards with no cap on stack/vent	
STRU 54	SV053	Large Parts Curing Oven	30.5	1	Null	Null	1,800	100	Estimate	Upwards with no cap on stack/vent	
STRU 57	SV057	Line 6 Paint & Touch-up Booth	28	2.5	Null	Null	12,190	70	Estimate	Upwards with no cap on stack/vent	
STRU 58	SV058	Line 6 Paint & Touch-up Booth	28	2.5	Null	Null	12,190	70	Estimate	Upwards with no cap on stack/vent	
STRU 61	SV061	Line 6 Curing Oven	28	1.5	Null	Null	3,490	70	Estimate	Upwards with no cap on stack/vent	
STRU 65	SV065	High Flow Line Oven	37.6	3.5	Null	Null	22,400	100	Estimate	Upwards with no cap on stack/vent	
STRU 67	SV067	High Flow Line Paint & Prime Booth	37.6	3.5	Null	Null	25,600	70	Estimate	Upwards with no cap on stack/vent	
STRU 86	Null	Burn Off Oven Vent	30	2	Null	Null	2,000	68	Estimate	Upwards with no cap on stack/vent	
STRU 87	Null	Monorail Topcoat	36	3.7	Null	Null	16,037	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 88	Null	Monorail Topcoat	36	3.7	Null	Null	16,037	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 89	Null	Monorail Prime	36	3.7	Null	Null	16,037	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 90	Null	Monorail Prime	36	3.7	Null	Null	16,037	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 91	Null	Monorail Curing Oven	36	1.5	Null	Null	5,800	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 92	Null	Monorail Curing Oven	36	1.5	Null	Null	5,800	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 95	Null	MFG Robot Booth Paint	32.5	2.5	Null	Null	12,190	70	Manufacturer	Upwards with no cap on stack/vent	

Stack/Vents

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item ID	Delta Designation	Description	Stack Height (feet)	Stack Diameter (feet)	Stack Length (feet)	Stack Width (feet)	Stack Flow Rate (cubic ft/min)	Discharge Temperature (°F)	Flow Rate/Temp Information Source	Discharge Direction	
STRU 96	Null	MFG Manual Booth Paint	32.5	2.5	Null	Null	12,190	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 97	Null	Side Loader Prime Booth	32.5	2.5	Null	Null	12,190	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 98	Null	Side Loader Prime Booth	32.5	2.5	Null	Null	12,190	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 99	Null	Side Loader Clear Coat Booth Air Make-Up	32.5	2.5	Null	Null	12,190	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 100	Null	Side Loader Clear Coat Booth Air Make-Up	32.5	2.5	Null	Null	12,190	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 101	Null	Side Loader Curing Oven	32.5	1.5	Null	Null	3,494	70	Manufacturer	Upwards with no cap on stack/vent	
STRU 102	Null	Monorail Blast Booth Stack (vents internally)	8.9	Null	11.5	1.25	9,000	70	Manufacturer	Horizontally	

Other Controls

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item Type	Subject Item ID	Delta Designation	Description	Manufacturer (Model #)	Installation Start Date	Pollutants Controlled	Capture Efficiency (%)	Destruction/ Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Other Basis Explanation	Other operating parameters?	Other operating parameters description	
058-Mat or Panel Filter	TREA 1	CE026	Refuse Line Paint Booth Panel Filter	Varied (NA)	6/3/2005	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 2	CE027	Line 6 Paint & Touch-up Booth Panel Filter	Varied (NA)	1/1/2011	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 4	CE029	High Flow Line Paint & Prime Booth Panel Filter	Varied (NA)	TBD	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 12	CE007	Large Parts Prime & Paint Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 14	CE009	Line 3 Paint Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 16	CE011	Line 4 Paint Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 17	CE013	Line 5 Paint Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	

Other Controls

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item Type	Subject Item ID	Delta Designation	Description	Manufacturer (Model #)	Installation Start Date	Pollutants Controlled	Capture Efficiency (%)	Destruction/ Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Other Basis Explanation	Other operating parameters?	Other operating parameters description
058-Mat or Panel Filter	TREA 17	CE013	Line 5 Paint Booth Panel Filter	Varied (NA)	1/1/1970	PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 18	CE017	Refuse Line Prime Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 30	CE009	Line 3 Touch-up Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 31	CE011	Line 4 Touch-up Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 32	CE013	Line 5 Touch-up Booth Panel Filter	Varied (NA)	1/1/1970	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 35	Null	Monorail Prime Booth Panel Filter	Varied (NA)	4/1/2023	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 36	Null	Monorail Paint Booth Panel Filter	Varied (NA)	4/1/2023	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null

Other Controls

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item Type	Subject Item ID	Delta Designation	Description	Manufacturer (Model #)	Installation Start Date	Pollutants Controlled	Capture Efficiency (%)	Destruction/Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Other Basis Explanation	Other operating parameters?	Other operating parameters description
058-Mat or Panel Filter	TREA 36	Null	Monorail Paint Booth Panel Filter	Varied (NA)	4/1/2023	PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 38	Null	Side Loader Prime Booth Panel Filter	Varied (NA)	4/1/2023	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 39	Null	Side Loader Paint Booth Panel Filter	Varied (NA)	4/1/2023	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 40	Null	Side Loader Clear Coat Booth Panel Filter	Varied (NA)	4/1/2023	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 41	Null	Refuse Line Prime Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 42	Null	Side Loader Paint Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
	TREA 43	Null	Side Loader Paint Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null

Other Controls

AI ID (Name): 434 (McNeilus Truck and Manufacturing Inc)
Activity: IND20220007

Subject Item Type	Subject Item ID	Delta Designation	Description	Manufacturer (Model #)	Installation Start Date	Pollutants Controlled	Capture Efficiency (%)	Destruction/Collect Efficiency (%)	Subject to CAM?	Large or Other PSEU?	Efficiency Basis	Other Basis Explanation	Other operating parameters?	Other operating parameters description	
058-Mat or Panel Filter	TREA 44	Null	Side Loader Prime Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 45	Null	Side Loader Prime Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 46	Null	Side Loader Clear Coat Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
	TREA 47	Null	Side Loader Clear Coat Booth Panel Filter	Paint Pockets (NA)	7/1/2024	Particulate Matter	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 2.5 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	
						PM < 10 micron	100	85	No	Null	Mfr/ Vendor data	Null	No	Null	

SI Id	Sequence	Requirement
TFAC 1	1240	This permit establishes limits on the facility to keep it a minor source under New Source Review. The Permittee cannot make any change at the source that would make the source a major source under New Source Review until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments. [Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) and Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	4090	Equipment Labeling: The Permittee must permanently affix a unique number to each emissions unit for tracking purposes. Each number must correlate the unit to the appropriate Subject Item number used in this permit. The number can be affixed by placard, stencil, or other means. The number must be maintained so that it is readable and visible at all times from a safe distance. If equipment is added, it must be given a new unique number; numbers from replaced or removed equipment must not be reused. [Minn. R. 7007.0800, subp. 2(A)]
	4100	Equipment Inventory: The Permittee must maintain a written list of all emissions units and control equipment on site. The Permittee must update the list to include any replaced, modified, or new equipment prior to making the change. The list must correlate the units to the Subject Item numbers used in this permit and must include the data on GI-04, GI-05B, GI-05C, and GI-05F. The date of construction must be the date the change was made for replaced, modified, or new equipment. [Minn. R. 7007.0800, subp. 2(A)]
	4105	Insignificant Activities: The Permittee must evaluate the emissions from changes made under Minn. R. 7007.1300 on an annual basis. The Permittee must not make any change that causes emissions to exceed permit thresholds in Minn. R. ch. 7007 without first obtaining the applicable permit amendment. [Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) and Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i)]
	4110	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in Appendices; Appendix A. Insignificant Activities and General Applicable Requirements Appendix B. Maximum Material Content, Maximum Capacity, and Minimum Transfer Efficiency Appendix C. 40 CFR Part 60, Subpart A - General Provisions Appendix D. 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Appendix E. 40 CFR Part 63, Subpart A - General Provisions Appendix F. 40 CFR Part 63, Subpart MMMM - National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products. [Minn. R. 7007.0800, subp. 2(A) & (B)]
	4120	The Permittee must comply with Minn. Stat. 116.385. The Permittee may not use trichloroethylene at its permitted facility including in any manufacturing, processing, or cleaning processes, except as described in Minn. Stat. 116.385, subd. 2(b) and 4. This is a state-only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7007.0100, subp. 7(X), Minn. Stat. 116.385]
	7410	PERMIT SHIELD: Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements. This permit shall not alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance. [Minn. R. 7007.1800(A)(2)]
	7440	The Permittee must comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0090. Compliance must be demonstrated upon written request by the MPCA. [Minn. R. 7007.0800, subp. 2(A) & (B), Minn. R. 7009.0020-7009.0090, Minn. Stat. 116.07, subd. 4a(a)]

SI Id	Sequence	Requirement
	7450	Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted. [Minn. R. 7011.0020]
	7540	The Permittee must at all times properly operate and maintain the facilities and systems of treatment and control and the appurtenances related to them that are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. [Minn. R. 7007.0800, subp. 16(J)]
	7550	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 16(J)]
	7560	Operation Changes: In any shutdown, breakdown, or deviation the Permittee must immediately or as soon as possible considering plant and personnel safety take all practical steps to modify operations to reduce the emission of any regulated air pollutant. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment are permitted to operate. [Minn. R. 7019.1000, subp. 4]
	7570	Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150. [Minn. R. 7011.0150]
	7580	Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the U.S. Environmental Protection Agency (EPA) Administrator and citizens under the Clean Air Act. [Minn. R. 7030.0010-7030.0080]
	7590	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A). [Minn. R. 7007.0800, subp. 9(A)]
	7600	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16. [Minn. R. 7007.0800, subp. 16]
	7610	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in this permit. [Minn. R. ch. 7017]
	7620	Performance Test Notifications and Submittals: Performance Test Notification and Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due seven days before each Performance Test Performance Test Report: due 45 days after each Performance Test The Notification, Test Plan, and Test Report must be submitted in a format specified by the commissioner. [Minn. R. 7017.2017, Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2]
	7630	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change. [Minn. R. 7017.2025, subp. 3]

SI Id	Sequence	Requirement
	7640	Monitoring Equipment Calibration - The Permittee shall either: 1. Calibrate or replace required monitoring equipment every 12 months; or 2. Calibrate at the frequency stated in the manufacturer's specifications. For each monitor, the Permittee shall maintain a record of all calibrations, including the date conducted, and any corrective action that resulted. The Permittee shall include the calibration frequencies, procedures, and manufacturer's specifications (if applicable) in the Operations and Maintenance Plan. Any requirements applying to continuous emission monitors are listed separately in this permit. [Minn. R. 7007.0800, subp. 4(D)]
	7650	Operation of Monitoring Equipment: Unless noted elsewhere in this permit, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system. [Minn. R. 7007.0800, subp. 4(D)]
	7660	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A). [Minn. R. 7007.0800, subp. 5(C)]
	7670	Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes. [Minn. R. 7007.0800, subp. 5(B)]
	7680	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format. [Minn. R. 7007.1200, subp. 4]
	7690	Shutdown Notifications: Notify the commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the Permittee does not have advance knowledge of the shutdown, the Permittee must notify the commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in items A, B, and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator must inform the commissioner of the cause of the shutdown and the estimated duration. The owner or operator must notify the commissioner when the shutdown is over. [Minn. R. 7019.1000, subp. 3]
	7770	Breakdown Notifications: Notify the commissioner within 24 hours of a breakdown of more than one hour of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in items A, B, and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the Permittee must inform the commissioner of the cause of the breakdown and the estimated duration. The Permittee must notify the commissioner when the breakdown is over. [Minn. R. 7019.1000, subp. 2]

SI Id	Sequence	Requirement
	7780	Notification of Deviations Endangering Human Health or the Environment: Immediately after discovery of the deviation or immediately after when the deviation reasonably should have been discovered, notify the commissioner either orally or by e-mail, or telephone the state duty officer at 800-422-0798 or 651-649-5451, of any deviation from permit conditions that could endanger human health or the environment. [Minn. R. 7019.1000, subp. 1]
	7790	Notification of Deviations Endangering Human Health or the Environment Report: Within two working days of discovery, notify the commissioner in writing of any deviation from permit conditions that could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. [Minn. R. 7019.1000, subp. 1]
	7810	Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed. Upon adoption of a new or amended federal applicable requirement, and if there are three or more years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150 - 7007.1500]
	7820	Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H). [Minn. R. 7007.1400, subp. 1(H)]
	7830	Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. Submit in a format specified by the Commissioner. [Minn. R. 7019.3000-7019.3100]
	7840	Emission Fees: due 30 days after receipt of an MPCA bill. [Minn. R. 7002.0005-7002.0085]
	7860	The Permittee shall submit an application for permit reissuance : Due 180 calendar days before Permit Expiration Date. [Minn. R. 7007.0400, subp. 2]
	7890	The Permittee must submit a semiannual deviations report : Due semiannually, by the 30th of January and July. The first semiannual report submitted by the Permittee must cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. Submit this on form DRF-2 (Deviation Reporting Form). If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(B)(2)]
	7900	The Permittee must submit a compliance certification : Due annually, by the 31st of January (for the previous calendar year). Submit this on form CR-04 (Annual Compliance Certification Report). This report covers all deviations experienced during the calendar year. If no deviations have occurred, submit the signed report certifying that there were no deviations. [Minn. R. 7007.0800, subp. 6(D)]
	7910	The Permittee must submit an annual report by the 31st of January. The report must describe the changes made at the Facility during the previous calendar year using the latest MPCA application forms. The report must include information for any new, modified, or replaced Subject Items. The report must document the VOC 12-month rolling sum calculations and the Material Usage 12-month rolling sum calculations for the previous calendar year. The report must be submitted with the annual Compliance Certification required by this permit. As part of the Annual Report, the Permittee must verify and certify that the Facility has maintained minor source status for New Source Review. [Minn. R. 7007.0800, subp. 2(A)]

SI Id	Sequence	Requirement
COMG 1	4	The Permittee must vent emissions from units in COMG 1 to control equipment meeting the requirements of COMG 4 whenever any unit in COMG 1 operates, as follows: EQUI 1 to TREA 1; EQUI 2 to TREA 2; EQUI 4 to TREA 4; EQUI 14 to TREA 16; EQUI 15 to TREA 17; EQUI 17 to TREA 18 and TREA 41 in series; EQUI 26 to TREA 12; EQUI 28 to TREA 14; EQUI 37 to TREA 30; EQUI 40 to TREA 31; EQUI 43 to TREA 32; EQUI 73 to TREA 35; EQUI 75 to TREA 36; EQUI 80 to TREA 39, TREA 42, and TREA 43 in series; EQUI 82 to TREA 38, TREA 44, and TREA 45 in series; and EQUI 84 to TREA 40, TREA 46, and TREA 47 in series. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	3680	Particulate Matter $\leq$ 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each member of COMG 1. [Minn. R. 7011.0715, subp. 1(A)]
	3690	Opacity $\leq$ 20 percent opacity. This limit applies individually to each member of COMG 1. [Minn. R. 7011.0715, subp. 1(B)]
	19650	The Permittee must operate each component of COMG 1 as a total enclosure as defined by Minn. R. 7011.0060, subp. 5 when surface coating is occurring. [Minn. R. 7007.0800, subp.2(A)]
	3570	Filterable Particulate Matter $\leq$ 0.40 pounds per million Btu heat input. The potential to emit from each unit in COMG 2 is 7.45E-03 lb/MMBtu due to equipment design and allowable fuels. This limit applies individually to each member of COMG 2. [Minn. R. 7011.0515, subp. 1]
COMG 2	3580	Opacity $\leq$ 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to each member of COMG 2. [Minn. R. 7011.0515, subp. 2]
	3632	Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a]
	3637	The Permittee shall keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5]
COMG 3	1	The Permittee must limit Material Usage $\leq$ 338,600 gallons per year 12-month rolling sum to be calculated by the 28th day of each month for the previous 12-month period as described later in this permit. All equipment that uses coatings in COMG 3 is subject to this limit. If the Permittee replaces any existing equipment that uses coatings, adds new equipment that uses coatings, or modifies the existing equipment, such equipment is subject to this permit limit. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit. [Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) and Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]

SI Id	Sequence	Requirement
	6	The Permittee must limit emissions of Volatile Organic Compounds $\leq$ 237 tons per year 12-month rolling sum to be calculated by the 28th day of each month for the previous 12-month period as described later in this permit. This includes all combustion-source emissions of VOC. All VOC-emitting equipment at the Facility is subject to this limit including current and future insignificant activities listed under Minn. R. 7007.1300 subps. 3 & 4 and Minn. R. ch. 7008. If the Permittee replaces any existing VOC-emitting equipment, adds new VOC-emitting equipment, or modifies the existing equipment, such equipment is subject to this permit limit. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. The Permittee is not required to complete VOC calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit. VOC contents for each VOC-containing material must be determined as described under the Material Content requirement in COMG 3. The calculation of VOCs used may take into account recovered/recycled VOCs as described under the Waste Credit requirement in COMG 3. [Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) and Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	8	Material Content. VOC content in all materials must be determined by the Safety Data Sheet (SDS) or the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. If a material content range is given on the SDS or the MSDS, the highest number in the range must be used in all compliance calculations. If information is provided in the Regulatory Section of the SDS, the highest number in the range of that section may be used. Other alternative methods approved by the MPCA may be used to determine the VOC content. The Commissioner reserves the right to require the Permittee to determine the VOC content of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained must supersede the SDS or the MSDS. [Minn. R. 7007.0800, subps. 4-5]
	10	Waste Credit: If the Permittee elects to obtain credit for VOC shipped in waste materials, the Permittee must either use item 1 or 2 to determine the VOC content for each credited shipment. 1) The Permittee must analyze a composite sample of each waste shipment to determine the weight content of VOC excluding water. 2) The Permittee may use supplier data for raw materials to determine the VOC contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste must be assumed to be the lowest VOC content of any of the materials. [Minn. R. 7007.0800, subps. 4-5]
	12	Maximum Material Contents, Maximum Capacity, and Minimum Transfer Efficiency: The Permittee assumed certain worst-case contents of materials, maximum application rates, and minimum transfer efficiencies when determining the short term potential to emit of units in COMG 3. These assumptions are listed in Appendix B of this permit. Changing to a material that has a higher content of any of the given pollutants, a higher application rate, or a lower transfer efficiency is considered a change in method of operation that must be evaluated under Minn. R. 7007.1200, subp. 3 to determine if a permit amendment or notification is required under Minn. R. 7007.1150. [Minn. R. 7005.0100, subp. 35a]
	3860	Daily Recordkeeping. On each day of operation, the Permittee must calculate, record, and maintain the total quantity of all coatings and other VOC-containing materials used at the facility. This must be based on shipping and delivery records. [Title I Condition: Avoid major modification under 40 CFR 52.21(b)(2) and Minn. R. 7007.3000, Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	4330	Material Usage: Monthly Recordkeeping. By the 28th of the month, the Permittee must calculate and record the following: 1) The total usage of coatings for the previous calendar month using the shipping and delivery records; 2) The 12-month rolling sum usage of coatings for the previous 12-month period by summing the monthly usage records for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]

SI Id	Sequence	Requirement
	4335	Volatile Organic Compounds: Monthly Recordkeeping -- VOC Emissions. By the 28th of the month, the Permittee must calculate and record the following: 1) The total usage of each VOC-containing material for the previous calendar month using the daily usage records. This record must also include the VOC and solids contents of each material as determined by the Material Content requirement of this permit; 2) The total natural gas usage for the previous month; 3) The VOC emissions for the previous month using the formulas specified in this permit; and 4) The 12-month rolling sum VOC emissions for the previous 12-month period by summing the monthly VOC emissions data for the previous 12 months. [Minn. R. 7007.0800, subps. 4-5]
	6980	Volatile Organic Compounds: Monthly Calculation -- VOC Emissions. The Permittee must calculate VOC emissions using the following equations: $\text{VOC (tons/month)} = V + G - W$ $V = (A1 \times B1) + (A2 \times B2) + (A3 \times B3) + \dots$ $G = E \times F$ $W = (C1 \times D1) + (C2 \times D2) + (C3 \times D3) + \dots$ where: V = total VOC used in tons/month; A# = amount of each VOC-containing material used, in tons/month; B# = weight percent VOC in A#, as a fraction; G = VOC emissions from natural gas combustion in tons/month; E = VOC emission factor for natural gas combustion, as appropriate; F = quantity of natural gas used/month; W = the amount of VOC shipped in waste, in tons/month; C# = amount, in tons/month, of each VOC-containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of VOC in C#, as a fraction. [Minn. R. 7007.0800, subps. 4-5]
COMG 4	17610	The Permittee must vent emissions from each unit in COMG 1 to control equipment meeting the requirements of COMG 4 whenever any unit in COMG 1 operates, and operate and maintain all control equipment in COMG 4 at all times that any emissions are vented to any control equipment in COMG 4. The Permittee must document periods of non-operation of the control equipment in COMG 4 whenever any unit in COMG 1 is operating. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	17615	If the Permittee replaces control equipment in COMG 4, the replacement control must meet or exceed the control efficiency requirements of COMG 4 as well as comply with all other requirements of COMG 4. Prior to making such a change, the Permittee must apply for and obtain the appropriate permit amendment, as applicable. If no amendment is needed for the replacement, the Permittee must submit an electronic notice to the Agency using Form CR-05. The notice must be received by the Agency seven working days prior to the commencement/start of replacement. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	18640	The Permittee must operate and maintain control equipment such that it achieves a control efficiency for Particulate Matter ≥ 85 percent control efficiency. This limit applies individually to each member of COMG 4. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	18650	The Permittee must operate and maintain control equipment such that it achieves a control efficiency for PM < 10 micron ≥ 85 percent control efficiency. This limit applies individually to each member of COMG 4. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	18655	The Permittee must operate and maintain control equipment such that it achieves a control efficiency for PM < 2.5 micron ≥ 85 percent control efficiency. This limit applies individually to each member of COMG 4. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	18665	Panel filters controlling EQUI 17 (TREA 18 and 41) shall be operated in series resulting in a combined control efficiency of 97.8% for EQUI 17. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A)]

SI Id	Sequence	Requirement
	18670	Panel filters controlling EQUI 80 (TREA 39, 42, and 43) shall be operated in series resulting in a combined control efficiency of 99.7% for EQUI 80. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A)]
	18680	Panel filters controlling EQUI 82 (TREA 38, 44, and 45) shall be operated in series resulting in a combined control efficiency of 99.7% for EQUI 82. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A)]
	18685	Panel filters controlling EQUI 84 (TREA 40, 46, and 47) shall be operated in series resulting in a combined control efficiency of 99.7% for EQUI 84. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A)]
	18690	Pressure Drop ≥ 0.01 and ≤ 5.0 inches of water, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range must be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. This limit applies individually to each member of COMG 4. If the recorded pressure drop is outside the required range, the emissions during that time must be considered uncontrolled until the pressure drop is once again within the required range. The period of time for which the pressure drop is considered out of range must be reported as a deviation. The Permittee must record the pressure drop at least once each operating day. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	18721	The Permittee must operate and maintain the panel filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee must keep copies of the O & M Plan available onsite for use by staff and MPCA staff. [Minn. R. 7007.0800, subp. 14]
	18722	Daily Inspections: Once each operating day, the Permittee must visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance and the condition of the manometer with respect to integrity of the tube, oil level (if applicable) and any other matter that may affect the manometer's performance. The Permittee must record the time and date of each inspection and any actions resulting from the inspection. [Title I Condition: Avoid major source under 40 CFR 52.21(b)(1)(i) and Minn. R. 7007.3000]
	18723	Corrective Actions: The Permittee must take corrective action as soon as possible if any of the following occur: - the recorded pressure drop is outside the required operating range; or - the panel filter or any of its components are found during the inspections to need repair. Corrective actions must return the pressure drop to within the permitted range and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the panel filter. The Permittee must keep a record of the type and date of any corrective action taken for each panel filter. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 2(A), Minn. R. 7007.0800, subp. 5]
	18724	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturer's specifications, the Permittee must inspect the control equipment components. The Permittee must maintain a written record of these inspections. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
	18725	Monitoring Equipment: The Permittee must install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored panel filter is in operation. [Minn. R. 7007.0800, subp. 4]
	18726	The Permittee must calibrate or replace the pressure drop monitor at least once every 12 months or at the frequency stated in the manufacturer's specifications and must maintain a written record of any action resulting from the calibration. [Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5]
COMG 7	1	HAPs - Organic ≤ 2.6 pounds per gallon coating solids 12-month rolling average (pounds organic HAPs emitted/gallon of coating solids) used during each 12-month compliance period. [40 CFR 63.3890(b)(1), 40 CFR 63.4481(e)(2), Minn. R. 7011.8090, Minn. R. 7011.8130]

SI Id	Sequence	Requirement
	10	The Permittee must comply with the predominant activity emission limit if plastic parts and products surface coating operations, as defined in 40 CFR pt. 63, subp. PPPP, resumes, and if the Permittee is eligible for compliance with the predominant activity emission limit (e.g. miscellaneous metal parts and products surface coating operations, as defined in 40 CFR pt. 63, subp. MMMM accounts for 90 percent or more of the surface coating activity at the facility). If plastic parts and products surface coating operations, as defined in 40 CFR pt. 63, subp. PPPP, resumes the Permittee must comply with the emission limitation representing the predominant surface coating activity as described in 40 CFR pt. 63.3881(e)(2) and 40 CFR pt. 63.4481(e)(2). [40 CFR 63.3881(e)(2), 40 CFR 63.4481(e)(2), Minn. R. 7011.8090, Minn. R. 7011.8130]
	14100	Based on the current and expected operations of the affected source, this permit only includes the emission rate without add-on controls option specified in 40 CFR Section 63.3891(b). If the Permittee later chooses to switch to or add one or both of the other compliance options allowed in the standard, the Permittee must comply with all applicable portions of 40 CFR pt. 63, subp. MMMM for those options. In addition, the Permittee must apply for a permit amendment, as appropriate (e.g., to add applicable NESHAP language, installation of an oxidizer, etc.). [40 CFR 63.3891, 40 CFR 63.4481(e)(2), Minn. R. 7011.8090, Minn. R. 7011.8130]
	14120	The Permittee must submit a semiannual compliance report: Due semiannually, by the 31st of January and July. The first semiannual compliance report submitted by the Permittee must cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. The Permittee must submit the semiannual compliance report to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX). [40 CFR 63.3920(a)(1), 40 CFR 63.3920(f), 40 CFR 63.4481(e)(2), Minn. R. 7011.8090, Minn. R. 7011.8130]
	35780	The Permittee must comply with the applicable requirements of 40 CFR pt. 63, subp. MMMM, as follows: 40 CFR 63.3880; 40 CFR 63.3881(a)(1)-(2); 40 CFR 63.3881(b); 40 CFR 63.3882(a); 40 CFR 63.3882(b)(1)-(4); 40 CFR 63.3882(e); 40 CFR 63.3883(b); 40 CFR 63.3883(d); 40 CFR 63.3890(b)(1); 40 CFR 63.3891(b); 40 CFR 63.3892(a); 40 CFR 63.3893(a); 40 CFR 63.3900(a)(1); 40 CFR 63.3900(b); 40 CFR 63.3901; 40 CFR 63.3910(a); 40 CFR 63.3910(b); 40 CFR 63.3910(c)(1)-(6); 40 CFR 63.3910(c)(7)(i)-(iv); 40 CFR 63.3910(c)(8)(ii); 40 CFR 63.3920(a)(1)-(2); 40 CFR 63.3920(a)(3)(i)-(v); 40 CFR 63.3920(a)(4); 40 CFR 63.3920(a)(6); 40 CFR 63.3920(d)-(h); 40 CFR 63.3930(a)-(b); 40 CFR 63.3930(c)(1); 40 CFR 63.3930(c)(3); 40 CFR 63.3930(d)-(h); 40 CFR 63.3930(j); 40 CFR 63.3931(a)-(c); 40 CFR 63.3950; 40 CFR 63.3951(a)-(h); 40 CFR 63.3952(a)-(d); 40 CFR 63.3980(a)-(c); 40 CFR 63.3981; 40 CFR pt. 63, subp. MMMM, Table 2; 40 CFR pt. 63, subp. MMMM, Table 3; and 40 CFR pt. 63, subp. MMMM, Table 4. A copy of 40 CFR pt. 63, subp. MMMM is in Appendix F. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.4481(e)(2), 40 CFR pt. 63, subp. MMMM, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.8090, Minn. R. 7011.8130]

SI Id	Sequence	Requirement
	35781	The Permittee must comply with all applicable requirements of 40 CFR pt. 63, subp. A as follows: 40 CFR 63.1(a); 40 CFR 63.1(b)(1); 40 CFR 63.1(b)(3); 40 CFR 63.1(c)(1); 40 CFR 63.1(c)(6); 40 CFR 63.1(e); 40 CFR 63.2; 40 CFR 63.3; 40 CFR 63.4; 40 CFR 63.5(a)-(b); 40 CFR 63.5(d)-(f); 40 CFR 63.6(a)(1); 40 CFR 63.6(c)(1)-(2); 40 CFR 63.6(f)(2)-(3); 40 CFR 63.6(g); 40 CFR 63.6(i)(1)-(6); 40 CFR 63.6(i)(8)-(9); 40 CFR 63.6(i)(11); 40 CFR 63.6(j); 40 CFR 63.9(b)(1); 40 CFR 63.9(b)(2); 40 CFR 63.9(b)(4)-(5); 40 CFR 63.9(c)-(d); 40 CFR 63.9(h)-(k); 40 CFR 63.10(a)(5)-(7); 40 CFR 63.10(b)(1); 40 CFR 63.10(b)(2)(x); 40 CFR 63.10(b)(2)(xii); 40 CFR 63.10(b)(2)(xiv); 40 CFR 63.10(b)(3); 40 CFR 63.10(d)(1); 40 CFR 63.10(d)(4); 40 CFR 63.10(f); 40 CFR 63.12; 40 CFR 63.13; 40 CFR 63.14; 40 CFR 63.15; and 40 CFR 63.16. A copy of 40 CFR pt. 63, subp. A is included in Appendix E. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.3901, 40 CFR 63.4481(e)(2), 40 CFR pt. 63, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(B), Minn. R. 7011.8090, Minn. R. 7011.8130, Minn. R. 7017.1010 & 7017.2015, subp. 3, Minn. R. 7019.0100]
COMG 8	3610	Filterable Particulate Matter <= 0.60 pounds per million Btu heat input. The potential to emit from COMG 8 is 7.45E-03 lb/MMBtu due to equipment design and allowable fuels. This limit applies individually to each member of COMG 8. [Minn. R. 7011.0510, subp. 1]
	3620	Opacity <= 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to each member of COMG 8. [Minn. R. 7011.0510, subp. 2]
	3632	Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a]
	3637	The Permittee must keep records of fuel purchases showing fuel types. [Minn. R. 7007.0800, subp. 5]
COMG 9	3520	The Permittee must limit Nitrogen Oxides <= 2.0 grams per horsepower-hour. This limit applies individually to each member of COMG 9. [40 CFR 60.4233(e), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. JJJJ(Table 1), Minn. R. 7011.2310, Minn. R. 7011.8150]
	3535	The Permittee must limit Carbon Monoxide <= 4.0 grams per horsepower-hour. This limit applies individually to each member of COMG 9. [40 CFR 60.4233(e), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. JJJJ(Table 1), Minn. R. 7011.2310, Minn. R. 7011.8150]
	3540	The Permittee must limit Volatile Organic Compounds <= 1.0 grams per horsepower-hour. This limit applies individually to each member of COMG 9. [40 CFR 60.4233(e), 40 CFR 63.6590(c), 40 CFR pt. 60, subp. JJJJ(Table 1), Minn. R. 7011.2310, Minn. R. 7011.8150]
	3550	Opacity <= 20 percent opacity once operating temperatures have been attained. This limit applies individually to each member of COMG 9. [Minn. R. 7011.2300, subp. 1]
	3560	Sulfur Dioxide <= 0.0015 pounds per million Btu heat input. The potential to emit from the unit is 0.00059 lb/MMBtu due to equipment design and allowable fuels. This limit applies individually to each member of COMG 9. [Minn. R. 7011.2300, subp. 2(B)]
	19530	Fuel type: Natural gas only, by design. [Minn. R. 7005.0100, subp. 35a]
	28180	Hours of Operation: The Permittee must maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, that allows calculation of potential emissions based on 500 operating hours per year. This applies individually to each member of COMG 9. [Minn. R. 7007.0800, subps. 4-5]
	28190	The Permittee must keep records of fuel type and usage on a monthly basis. [Minn. R. 7007.0800, subp. 5]
	28200	The emergency generators in COMG 9 are new affected sources as defined under 40 CFR pt. 63, subp. ZZZZ, are emergency RICE with a site rating of less than 500 brake HP, and the facility is a major source as defined at 40 CFR 63.2. The Permittee must meet the requirements of 40 CFR pt. 63, subp. ZZZZ by meeting the requirements of 40 CFR pt. 60, subp. JJJJ. No further requirements of 40 CFR pt. 63, subp. ZZZZ apply to the emergency generators in COMG 9. [40 CFR 63.6590(c), Minn. R. 7011.8150]

SI Id	Sequence	Requirement
	28210	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. JJJJ as follows: 40 CFR 60.4230(a)(4)(iv); 40 CFR 60.4230(a)(6); 40 CFR 60.4233(e), as it pertains to stationary SI ICE meeting the criteria in the first sentence of this item; 40 CFR 60.4234; 40 CFR 60.4237(b); 40 CFR 60.4243(b)(1); 40 CFR 60.4243(a)(1); 40 CFR 60.4243(d); 40 CFR 60.4243(d)(1); 40 CFR 60.4243(d)(2); 40 CFR 60.4243(d)(2)(i); 40 CFR 60.4243(d)(3); 40 CFR 60.4243(e); 40 CFR 60.4245(a)(1)-(a)(3); 40 CFR 60.4245(b); 40 CFR 60.4245(e); 40 CFR 60.4245(g); 40 CFR 60.4246; 40 CFR 60.4248; and 40 CFR pt. 60, subp JJJJ, Table 1 . A copy of 40 CFR pt. 60, subp. JJJJ is included in Appendix D. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR 63.6590(c), 40 CFR pt. 60, subp. JJJJ, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.2310, Minn. R. 7011.8150]
	28220	The Permittee must comply with all applicable requirements of 40 CFR pt. 60, subp. A as follows: 40 CFR 60.1(a)-(c); 40 CFR 60.2; 40 CFR 60.3; 40 CFR 60.4; 40 CFR 60.5; 40 CFR 60.6(a)-(b); 40 CFR 60.7(a)(1); 40 CFR 60.7(a)(4); 40 CFR 60.7(b); 40 CFR 60.9; 40 CFR 60.11(d); 40 CFR 60.11(f)-(g); 40 CFR 60.12; 40 CFR 60.14(a)-(c); 40 CFR 60.14(e)-(l); 40 CFR 60.15; 40 CFR 60.17; and 40 CFR 60.19. A copy of 40 CFR pt. 60, subp. A is included in Appendix C. If the standard changes or upon adoption of a new or amended federal applicable requirement, and if there are more than three years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3. [40 CFR pt. 60, subp. A, Minn. R. 7007.0400, subp. 3, Minn. R. 7007.1150-7007.1500, Minn. R. 7011.0050, subp. 1(A), Minn. R. 7017.1010 & 7017.2015, subp. 2, Minn. R. 7019.0100]
	35700	If the emergency stationary engine operates for the purposes specified in 40 CFR 60.4243(d)(3)(i), the Permittee must submit an annual report for each calendar year no later than March 31 of the following calendar year. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emission Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange CDX) (https://cdx.epa.gov/). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4 and emailed to the MPCA as directed in Section 2 of this permit for other compliance submittals. Beginning on February 26, 2025, submit the annual report electronically according to 40 CFR 60.4214(g). [40 CFR 60.4245(e)(2), 40 CFR 60.4245(e)(3), 40 CFR 60.4245(g), 40 CFR 63.6590(c), Minn. R. 7011.2310, g, Minn. R. 7011.8150]
EQUI 70	3680	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
	3690	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]
EQUI 87	3680	Opacity <= 20 percent opacity. [Minn. R. 7011.0715, subp. 1(B)]
	3690	Particulate Matter <= 0.30 grains per dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. [Minn. R. 7011.0715, subp. 1(A)]

McNeilus Truck and Manufacturing Inc.
Permit Action No. 03900014-102
Technical Support Document

Attachment 3
Insignificant Activities Space Heaters Summary

The Table below summarizes the individual space heaters that are included in the permit as EQUI 62. A single meter tracks all the natural gas usage at the facility, so it is not feasible to track the emissions from the space heaters individually. Therefore, all these units are tracked as a single emissions unit (EQUI 62) for emissions inventory purposes.

Number of Heating Units	Description	Individual Heat Input (MMBtu/hr)	Total Heat Input (MMBtu/hr)	Insignificant Activity Citation (Minn. R. 7007.1300)
North Paint Building				
11	IR heater	0.09	0.99	subp. 3(F)
Former NCI Building				
28	IR heater	0.09	2.52	subp. 3(F)
1	IR heater	0.12	0.12	subp. 3(F)
1	heater	4	4	subp. 4
2	IR heater	0.06	0.12	subp. 3(F)
R&D Building				
10	IR heater	0.09	0.9	subp. 3(F)
1	heater	2.7	2.7	subp. 4
2	heater	0.125	0.25	subp. 3(F)
Plants Building				
5	IR heater	0.09	0.45	subp. 3(F)
4	IR heater	0.12	0.48	subp. 3(F)
1	IR heater	0.06	0.06	subp. 3(F)
1	IR heater	0.096	0.096	subp. 3(F)
T&E Building				
17	IR heater	0.09	1.53	subp. 3(F)
3	IR heater	0.06	0.18	subp. 3(F)
5	IR heater	0.07	0.35	subp. 3(F)
32	IR heater	0.12	3.84	subp. 3(F)
Main Office				
2	heater	0.08	0.16	subp. 3(F)
4	heater	0.1	0.4	subp. 3(F)
1	heater	0.096	0.096	subp. 3(F)
1	heater	0.216	0.216	subp. 3(F)
1	heater	0.07	0.07	subp. 3(F)
1	heater	0.12	0.12	subp. 3(F)

1	heater	0.16	0.16	subp. 3(F)
Scale Building				
6	IR heater	0.09	0.54	subp. 3(F)
Warming Shed				
12	IR heater	0.09	1.08	subp. 3(F)
1	space heater	0.4	0.4	subp. 3(F)
Paint and Solvent Storage Area				
1	heater	0.825	0.825	subp. 3(F)
Manufacturing Building				
8	heater	4.32	34.56	subp. 4
35	IR heater	0.06	2.1	subp. 3(F)
66	IR heater	0.09	5.94	subp. 3(F)
7	IR heater	0.12	0.84	subp. 3(F)
8	IR heater	0.15	1.2	subp. 3(F)
1	IR heater	0.09	0.09	subp. 3(F)
1	IR heater	0.2	0.2	subp. 3(F)
Total Heat Input Minn. R. 7007.1300, subp. 3(F)			26.3 MMBtu/hr	
Total Heat Input Minn. R. 7007.1300, subp. 4			41.3 MMBtu/hr	
Total Heat Input EQUI 62			67.6 MMBtu/hr	

McNeilus Truck and Manufacturing Inc.
Permit Action No. 03900014-102
Technical Support Document

Attachment 4
Enforcement Action Documents

October 19, 2023

John C. Pfeifer, CEO
Attn: Matthew Gregory, Sr. Env. Manager
524 East Highway Street
Dodge Center, MN 55927

RE: Alleged Violations Letter
McNeilus Truck and Manufacturing Inc, Dodge Center, Dodge County

Dear John C. Pfeifer:

On August 9, 2023, the Minnesota Pollution Control Agency (MPCA) staff inspected your facility as part of a routine inspection and identified the following alleged violations.

This letter describes actions you should take to correct the violations.

Please respond within ten days with facts or circumstances we should consider in determining whether and what level of enforcement action is appropriate.

Alleged Violations

Air Quality—Minn. R. ch. 7007 and ch. 7011, Air Emission Permit No. 03900014-101, Minn. Stat. ch. 115

1. Failure to submit the NESHAP ZZZZ Annual Compliance Reports for emergency generators with 100hp or greater for the years of: 2020, 2021, 2022, and 2023.
2. Failure to obtain an air permit amendment prior to installation of an emergency generator EQUI 65 on April 1, 2021.
3. Failure to submit NESHAP MMMM first half semiannual deviations report for the periods of: first half of 2020 report, first half of 2021 report, first half of 2022 report, first half of 2023 report.
4. Failure to conduct daily recordkeeping for the following pieces of equipment, periods of operating time, and percentage of readings:

Equipment	Time Period	Percent of readings indicating deviations
TREA 13	First Half 2020	1.1%
TREA 17	First Half 2020	1.1%
TREA 19	First Half 2020	0.55%
TREA 43	First Half 2020	1.1%
TREA 2	Second Half 2020	1.1%
TREA 12	Second Half 2020	1.1%
TREA 13	Second Half 2020	2.2%

TREA 17	Second Half 2020	1.6%
TREA 19	Second Half 2020	1.1%
TREA 20	Second Half 2020	0.5%
TREA 32	Second Half 2020	1.6%
TREA 43	Second Half 2020	1.6%
TREA 17	Second Half 2022	1.1%
TREA 32	Second Half 2022	0.5%

Corrective Action

Within 20 days you must:

1. Submit the first half semiannual NESHAP MMMM reporting for the years of 2020, 2021, 2022, and 2023 ensure that all items from air permit requirement 5.7.33 are complete in the NESHAP MMMM semiannual report as discussed during review.
2. Submit NESHAP ZZZZ Annual Compliance Reports for emergency generators with 100hp or greater for the years of: 2020, 2021, 2022, and 2023.
3. Submit a plan to ensure that the Regulated Party will obtain an air emission permit or amendment prior to starting construction of equipment or modification to a facility that would require a permit application or amendment.
4. Submit a plan describing steps the Regulated Party will take to ensure pressure drop readings are taken on COMG 4 and TREA 43 panel filters every 24-hour period. This plan should differ from the one submitted October 8, 2020, in response to the September 28, 2020, Notice of Violation.

Responding to this letter and completing the corrective actions, does not prevent us from issuing an enforcement action. We reserve the right to pursue any and all remedies available under law as an appropriate response to these violations.

We will contact you to discuss next steps in this process. In the meantime, please contact me by phone at 651-757-2489 or by email at marin.ryan@state.mn.us if you have any questions or need assistance.

Sincerely,

Marin Ryan

This document has been electronically signed.

Marin Ryan
Environmental Specialist
Industrial Division

MR:vs

cc: Rachel Studanski, MPCA
Brent Rohne, MPCA
Activity ID INS20230001 @ 434

February 6, 2024

James W. Johnson, CEO
Attn: Matthew Gregory, Sr. Env. Manager
McNeilus Truck and Manufacturing Inc
PO Box 70
Dodge Center, MN 55927-0070

RE: Notice of Violation
McNeilus Truck and Manufacturing Inc, Dodge Center, Dodge County

Dear James W. Johnson:

Enclosed/Attached is a Notice of Violation (NOV) for alleged violations of air emissions permit # 03900014-101.

The first section of the NOV cites the environmental requirements allegedly violated.

The second section contains the corrective actions you must complete to resolve the NOV. You must provide documentation that you completed each corrective action by the deadline specified in the NOV.

On November 1, 2023, and November 2, 2023, the Regulated Party submitted documentation that all corrective actions have been completed. The NOV and the Regulated Party's response will remain on record at the MPCA. The response does not preclude the MPCA from taking further action with respect to the violations listed in the NOV.

Respond in writing within ten days if you believe an alleged violation is incorrect.

If you have any questions or need assistance, contact me by phone at 651-757-2489 or by email at marin.morrell@state.mn.us.

Sincerely,

Marin Morrell

This document has been electronically signed.

Marin Morrell
Environmental Specialist
Industrial Division

MM:cac

Enclosure/Attachment

cc: See next page.

James W. Johnson

Page 2

February 6, 2024

cc: Rachel Studanski, MPCA (w/attachment)
Brent Rohne, MPCA (w/attachment)
Activity ID NON20240001 @ 434

STATE OF MINNESOTA
Minnesota Pollution Control Agency
Industrial Division

NOTICE OF VIOLATION

In the Matter of: McNeilus Truck and Manufacturing Inc, Dodge Center, Dodge County

To:

McNeilus Truck and Manufacturing Inc
PO Box 70
Dodge Center, MN 55927-0070

PLEASE BE ADVISED, that the Minnesota Pollution Control Agency (MPCA) has sufficient information to allege that McNeilus Truck and Manufacturing Inc (hereinafter Regulated Party) has violated the following provisions of federal regulations, state statutes, rules, and permit conditions at its facility located in Dodge Center, Dodge County, Minnesota.

1. Air Emissions Permit No. 03900014-101; 6. Submittal/action requirements; TFAC 1; 6.3.1; Pages 42-43

NESHAP Subpart M

Semiannual Compliance Report: due 31 days after the end of each calendar half-year starting 02/01/2008, for each affected source. The report shall contain the information specified below.

The Permittee may submit this report with the Semiannual Deviations Report also listed in Table B of this permit.

Content of semiannual compliance report: At a minimum, the report shall include:

- 1) Company name and address;
- 2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
- 3) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation;
- 4) Identification of the compliance option or options specified in 40 CFR Section 63.3891 that the Permittee used on each coating operation during the reporting period. If the Permittee switched between compliance options during the reporting period, the Permittee shall report the beginning and ending dates for each option the Permittee used.
- 5) If the Permittee used the emission rate without add-on controls (40 CFR Section 63.3891(b)), the Permittee shall include the calculation results for each rolling 12-month

- organic HAP emission rate during the 6-month reporting period;
- 6) If the Permittee used the predominant activity alternative (40 CFR Section 63.3890(c)(1)), the Permittee shall include the annual determination of predominant activity if it was not included in the previous semiannual compliance report;
- 7) If the Permittee used the facility-specific emission limit alternative (40 CFR Section 63.3890(c)(2)), the Permittee shall include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period; and
- 8) Whether any deviations occurred during the reporting period, according to the Deviation Reporting requirement below....(cont.).

On August 9, 2023, the MPCA conducted an air compliance inspection at the Regulated Party's facility. Prior to that inspection, a file review was performed on the Regulated Party where it was discovered that the Regulated Party had not submitted its first half NESHAP MMMM semiannual deviations reports for the first half of 2020, the first half of 2021, the first half of 2022, and the first half of 2023. The Regulated Party had submitted the second half deviations reports for 2020, 2021 and 2022.

2. Air Emissions Permit No. 03900014-101; 5. Limits and other requirements; COMG 4 Panel Filters; 5.5.15; Page 23

Pressure Drop: Recordkeeping. At least once per 24-hour period, the Permittee must read and record the pressure drop across the panel filter. The Permittee must record the time and date of each pressure drop reading and whether or not the observed pressure drop was within the range specified in this permit. Recorded values outside the range specified in this permit are considered excursions as defined in 40 CFR 64.1.

On July 30, 2020, the Regulated Party submitted its first half semiannual deviations report (DRF-2) for 2020. The Regulated Party self-reported that it had failed to conduct daily recordkeeping for several pieces of control equipment as shown in the table below.

On January 30, 2021, the Regulated Party submitted its second half semiannual deviations report (DRF-2) for 2020. The Regulated Party self-reported that it had failed to conduct daily recordkeeping for several pieces of control equipment as shown in the table below.

Equipment	Time Period	Percent of readings indicating deviations
TREA 13	First Half 2020	1.1%
TREA 17	First Half 2020	1.1%
TREA 19	First Half 2020	0.55%
TREA 43	First Half 2020	1.1%
TREA 2	Second Half 2020	1.1%
TREA 12	Second Half 2020	1.1%
TREA 13	Second Half 2020	2.2%
TREA 17	Second Half 2020	1.6%
TREA 19	Second Half 2020	1.1%
TREA 20	Second Half 2020	0.5%

Equipment	Time Period	Percent of readings indicating deviations
TREA 32	Second Half 2020	1.6%
TREA 43	Second Half 2020	1.6%
TREA 17	Second Half 2022	1.1%
TREA 32	Second Half 2022	0.5%

3. Air Emissions Permit No. 03900014-101; 5. Limits and other requirements; TFAC 1; 5.1.28; Page 17

Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.

Upon adoption of a new or amended federal applicable requirement, and if there are more than 3 years remaining in the permit term, the Permittee shall file an application for an amendment within nine months of promulgation of the applicable requirement, pursuant to Minn. R. 7007.0400, subp. 3.

Minn. Stat. § 116.081 Prohibitions, which provides in relevant part:

Subd. 1. Permit required. It shall be unlawful for any person to construct, install, or operate an emission facility, air contaminant treatment facility, treatment facility, potential air contaminant storage facility, storage facility, or system or facility related to the collection, transportation, storage, processing, or disposal of waste, or any part thereof unless otherwise exempted by any agency rule now in force or hereinafter adopted, until plans therefor shall have been submitted to the agency and a written permit therefor shall have been granted by the agency.

Minn. R. 7007.0150 PERMIT REQUIRED,

Subp. 1. Prohibition. No person may construct, modify, reconstruct, or operate an emissions unit, emission facility, or stationary source except in compliance with an air emission permit from the agency. Exceptions to the requirement to obtain a permit are located in part 7007.0300. Exceptions to the requirement to obtain a permit amendment are located in parts 7007.1250 and 7007.1350.

On August 9, 2023 the MPCA conducted an air compliance inspection at the Regulated Party's facility and discovered that on April 1, 2021, the Regulated Party installed a new Emergency Generator (EQUI 65) to replace EQUI 56 Emergency Generator. The Regulated Party was required to submit a minor permit amendment application seven days prior to replacing EQUI 56 but failed to do so.

CORRECTIVE ACTION

To address the alleged violations cited in this Notice of Violation (NOV), the Regulated Party is to complete the following actions:

1. Within 30 days, submit a plan describing steps the Regulated Party will take to ensure pressure drop readings are taken on COMG 4 and TREA 43 panel filters every 24-hour period. This plan should differ from the one submitted October 8, 2020, in response to the September 28, 2020, Notice of Violation.

...This Requirement is Complete.

2. Within 30 days, submit a plan to ensure that the Regulated Party will obtain an air emission permit or amendment prior to starting construction of equipment or modification to a facility that would require a permit application or amendment.

...This Requirement is Complete.

3. Within 30 days, submit the first half semiannual NESHAP MMMM reporting for the years of 2020, 2021, 2022, and 2023 ensure that all items from air permit requirement 5.7.33 are complete in the NESHAP MMMM semiannual report as discussed during review.

...This Requirement is Complete.

NOTICE

THEREFORE, you are hereby given notice that the MPCA has recorded and documented the above alleged violations. This NOV and your response does not preclude the MPCA from taking further action with respect to the above alleged violations. The MPCA reserves the right to seek any and all remedies available under Minn. Stat. §§ 115.071, 116.072, 116.073, and 609.671 and all applicable rules or permits for any violation cited in the NOV. If the Regulated Party believes the allegations in this NOV are incorrect, please respond in writing within ten days after receiving this NOV and explain any inaccuracies. If the Regulated Party does not respond, the MPCA will conclude that the alleged violations occurred as set forth in the NOV.

STATE OF MINNESOTA POLLUTION CONTROL AGENCY

Rachel L. Studanski

This document has been electronically signed.

Rachel L. Studanski
Supervisor
Air Compliance Unit
Industrial Division

February 6, 2024

Date signed

RLS/MM:cac

Address questions and submittals requested above to:

Marin Morrell
Minnesota Pollution Control Agency
520 Lafayette Rd
St. Paul, MN 55155
651-757-2489
marin.morrell@state.mn.us