MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

August 17, 2020

PERMIT TO INSTALL 79-03C

ISSUED TO Qualawash Holdings, LLC

LOCATED AT 50321 East Russell Schmidt Boulevard Chesterfield, Michigan 48051

IN THE COUNTY OF

Macomb

STATE REGISTRATION NUMBER N7164

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:

July 15, 2020 DATE PERMIT TO INSTALL APPROVED: SIGNATURE: August 17, 2020 SIGNATURE: DATE PERMIT VOIDED: SIGNATURE: DATE PERMIT REVOKED: SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
co	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic neter
°F	Degrees Fahrenheit
-	Grains
gr HAP	Hazardous Air Pollutant
	Mercury
Hg	5
hr HP	Hour
	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NOx	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
hð	Microgram
μm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). (R 336.1301)
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. (R 336.2001)

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

	Installation		
	Emission Unit Description (Including Process Equipment & Control	Date / Modification	
Emission Unit ID	Device(s))	Date	Flexible Group ID
EULINEHEELING	Process line container disassembly and heel removal station. Heel waste will be removed from the containers using a gravity system.	4-18-2005 / TBD	FGPROCESSLINE
EULINEFIRSTRINSE	Process line first rinse station with three rotating water wash spray heads with sealing lids. Unheated low pressure wash solution (50% water and 50% butyl cellosolve) is used and recycled through the wash water filter system.	4-18-2005 / TBD	FGPROCESSLINE
EULINESECONDRINSE	Process line second rinse station with three rotating water wash spray heads with sealing lids. Unheated ultra-high pressure (approximately 1,800 psi wash solution (75% water and 25% butyl cellosolve) is used.	4-18-2005 / TBD	FGPROCESSLINE
EULINETHIRDRINSE	Process line third rinse station with three rotating spray heads with sealing lids. Butyl cellosolve used to rinse totes at approximately 350 psi and recycled through the filtration system.	4-18-2005	FGPROCESSLINE
EULINEFINALRINSE	Process line final rinse station with three rotating sprays head with sealing lids. Butyl cellosolve is used to rinse totes at approximately 235 psi and recycled through the filtration system.	4-18-2005	FGPROCESSLINE
EUIMPELLERWASH	Impeller spray wash cabinet using 50% water and 50% butyl cellosolve solution.	4-18-2005	FGPROCESSLINE
EUVALVEWASH	Bottom valve spray wash cabinet using 50% water and 50% butyl cellosolve solution.	4-18-2005	FGPROCESSLINE
EUEXTERIOR	Exterior cleaning station. The exterior of the totes are cleaned by hand using Midas Strip SP3341.	4-18-2005 / TBD	
EUOFFHEELING	Off-line container disassembly and heel removal station. Heel waste will be gravity drained and collected in 55-gallon drums.	4-18-2005	FGOFFLINE
EUOFFFIRSTRINSE	Off-line first rinse station with rotating spray head with sealing lids. Ultra-high pressure (approximately 18,000 psi) wash solution (75% water and 25% butyl cellosolve) is used and recycled through the filtration system.	4-18-2005 / TBD	FGOFFLINE

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUOFFSECONDRINSE	Off-line second rinse station with rotating spray head with sealing lids. Low pressure (approximately 30 psi) wash solution (butyl acetate) is used and recycled through the filtration system.	4-18-2005,	FGOFFLINE

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

EUEXTERIOR EMISSION UNIT CONDITIONS

DESCRIPTION

Exterior cleaning station. The exterior of the totes are cleaned by hand using Midas Strip SP3341.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	32.7 tpy	12-month rolling time period as determined at the end of each calendar month	EUEXTERIOR	SC VI.3	R 336.1205, R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Cleaning Solvent		12-month rolling time period as determined at the end of each calendar month		SC VI.3	R336.1205(3), R336.1225, R336.1702

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a))
- The permittee shall handle all VOC and / or HAP containing materials in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1225, R 336.1702(a))
- The permittee shall keep overhead doors located adjoining the tote cleaning operations closed during all tote cleaning operations, and for a half hour after tote cleaning operations are complete to minimize the generation of fugitive emissions. (R 336.1225, R 336.1702(a), R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall determine the VOC content of any cleaner using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. (R 336.1205, R 336.1225, R 336.1702)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702)**
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used for cleaning totes, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702)
- 3. The permittee shall keep the following information on a monthly basis for the use of exterior cleaning solvent associated with EUEXTERIOR:
 - a) Gallons of each solvent used and reclaimed.
 - b) VOC content, in pounds per gallon, of each solvent used.
 - c) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702(a))

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SVGENVENT1	56	28	R 336.1225,
				40 CFR 52.21(c) & (d)
2.	SVGENVENT2	56	28	R 336.1225,
				40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGPROCESSLINE	A semi-continuous container cleaning process line where used totes containing paint and other surface coatings are received at the facility, drained of excess material, cleaned, inspected, and returned to the customer for reuse.	EULINEHEELING, EUIMPELLERWASH, EUVALVEWASH, EULINEFISRTRINSE, EULINESECONDRINSE, EULINETHIRDRINSE, EULINEFINALRINSE
FGOFFLINE	A container cleaning process line where used totes containing paint and other surface coatings are received at the facility, drained of excess material, cleaned, inspected, and returned to the customer for reuse.	EUOFFHEELING, EUOFFFIRSTRINSE, EUOFFSECONDRINSE

FGPROCESSLINE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A semi-continuous container cleaning process line where used totes containing paint and other surface coatings are received at the facility, drained of excess material, cleaned, inspected, and returned to the customer for reuse.

Emission Units: EULINEHEELING, EUIMPELLERWASH, EUVALVEWASH, EULINEFISRTRINSE, EULINESECONDRINSE, EULINETHIRDRINSE, EULINEFINALRINSE.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	VOC	42.62 tpy	5	FGPROCESSLINE	SC VI.4	R 336.1205,
			period as determined at			R 336.1225,
			the end of each			R 336.1702(a)
			calendar month			

II. MATERIAL LIMIT(S)

			Time Period/Operating		Monitoring/ Testing	Underlying Applicable
	Material	Limit	Scenario	Equipment	Method	Requirements
1.	Butyl Cellosolve	50,000	12-month rolling time	FGPROCESSLINE	SC VI.6	R336.1205(3),
	(CAS No. 111-76-2)	gallons	period as determined			R336.1225,
			at the end of each			R336.1702
			calendar month			
2.	Heel Waste	200,000	12-month rolling time		SC VI.7	R336.1205(3),
	Collected	gallons	period as determined			R336.1225,
			at the end of each			R336.1702
			calendar month			

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall conduct cleaning of totes using methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include one or more of the following:
 - a) High pressure water cleaning.
 - b) Cleaning by use of an organic solvent if the equipment being cleaned is covered or enclosed, except for openings necessary to allow for safe clearance considering the methods and materials being used, such as openings to drain materials and vents on impeller and wash cabinets. (R336.1702(a))
- 2. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a))

- The permittee shall handle all VOC and / or HAP containing materials in a manner to minimize the generation of fugitive emissions. Operations to minimize fugitive emissions shall include, but are not limited to, the following:
 - a) Keeping containers covered at all times except when operator access is necessary.
 - b) Installing and maintaining a level sensor on the heel waste collection system to ensure only liquid waste is being pumped from the storage trough into the storage tank.
 - c) Installing and maintaining a properly operating control valve on the heel waste storage tank to minimize the venting of fugitive emissions.
 - d) Inspecting the heel waste collection system, including level sensor and control valve, for proper operation on a daily basis and making repairs in a timely manner.
 - e) Inspecting the container cleaning process line, including tanks and valves, for leaks on a daily basis and repairing leaks in a timely manner.
 - f) Emptying the containment pit (secondary containment) for the container cleaner process line in a timely manner, not to exceed 24 hours. (R 336.1225, R 336.1702(a))
- 4. The permittee shall not process more than 25 totes per hour based on a daily average, nor 60,000 totes per 12-month rolling time period as determined at the end of each calendar month. (R336.1205(3), R336.1225, R336.1702)
- 5. The permittee shall keep overhead doors located adjoining the tote cleaning operations closed during all tote cleaning operations, and for a half hour after tote cleaning operations are complete to minimize the generation of fugitive emissions. (R 336.1225, R 336.1702(a), R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

Within two years after issuance of PTI 79-03C, the permittee shall verify the butyl cellosolve (CAS# 111-76-2) emission factor from FGPROCESSLINE (excluding EULINEHEELING) by testing at the owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1225, R 336.1702, R 336.2001)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702)**
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used for cleaning totes, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702)

3. The permittee shall use the following emission factors for calculating FGPROCESSLINE emissions.

Pollutant		Emission Factor	Equipment
a)	VOC	0.32 lbs VOC per gallon	Evaporation from residual liquids in
		collected	EULINEHEELING.
b)	VOC	0.01 lbs VOC per tote	Headspace emissions from EULINEHEELING.
c)	Butyl cellosolve	33.79% by weight of virgin	Emissions from rinse lines and cleaning in
	(CAS No. 111-76-2)	butyl cellosolve used	FGPROCESSLINE
d)	Butyl cellosolve	0.36 lbs / tote	Emissions credit for butyl cellosolve remaining in
	(CAS No. 111-76-2)		totes following rinse lines in FGPROCESSLINE.

An alternative emission factor may be used following a written submittal and subsequent approval by the AQD District Supervisor. (R 336.1225, R 336.1702(a))

- 4. The permittee shall keep the following information on a monthly basis for FGPROCESSLINE:
 - a) The approved emission factor for each process in FGPROCESSLINE.
 - b) VOC mass emission calculations determining the monthly emission rate in tons per calendar month.
 - c) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using emission factors acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702(a))

- 5. The permittee shall keep the following information for FGPROCESSLINE:
 - a) Hours of operation each calendar day.
 - b) Totes processed each calendar day.
 - c) Hourly average number of totes processed each calendar day.
 - d) Totes processed each calendar month.
 - e) Totes processed per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep all records on file in a satisfactory manner and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

- 6. The permittee shall keep, in a satisfactory manner, records of the amount of butyl cellosolve used each calendar month and 12-month rolling time period as determined at the end of each calendar month, as required by SC II.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702(a))
- 7. The permittee shall keep, in a satisfactory manner, records of the amount of heel waste collected from EULINEHEELING each calendar month and 12-month rolling time period as determined at the end of each calendar month, as required by SC II.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702(a))
- 8. The permittee shall keep, in a satisfactory manner, records of the heel waste collection system daily inspections, as required by SC III.3d. (R 336.1225, R 336.1702(a))
- 9. The permittee shall keep, in a satisfactory manner, records of the container cleaner process line daily inspections and timely emptying of the containment pit (secondary containment), as required by SC III.3e and SC III.3f. (R 336.1225, R 336.1702(a))

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGENVENT1	56	28	R 336.1225,
			40 CFR 52.21(c) & (d)
2. SVGENVENT2	56	28	R 336.1225,
			40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGOFFLINE FLEXIBLE GROUP CONDITIONS

DESCRIPTION

A container cleaning process line where used totes containing paint and other surface coatings are received at the facility, drained of excess material, cleaned, inspected, and returned to the customer for reuse.

Emission Unit: EUOFFHEELING, EUOFFFIRSTRINSE, EUOFFSECONDRINSE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall conduct cleaning of totes using methods and materials that minimize the emission of volatile organic compounds. These methods and materials shall include one or more of the following:
 - a) Hot alkali or detergent cleaning.
 - b) High pressure water cleaning.
 - c) Cleaning by use of an organic solvent if the equipment being cleaned is completely covered or enclosed, except for an opening that is no larger than necessary to allow for safe clearance considering the methods and materials being used. (R336.1702(a))
- 2. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a))
- The permittee shall handle all VOC and / or HAP containing materials in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1225, R 336.1702(a))
- 4. The permittee shall not process more than 3 totes per hour based on a daily average, nor 4,000 totes per 12-month rolling time period as determined at the end of each calendar month. (R336.1205(3), R336.1225, R336.1702)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702)**
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material used for cleaning totes, including the weight percent of each component. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702)
- 3. The permittee shall keep the following information for FGOFFLINE:
 - a) Hours of operation each calendar day.
 - b) Totes processed each calendar day.
 - c) Hourly average number of totes processed each calendar day.
 - d) Totes processed each calendar month.
 - e) Totes processed per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep all records on file in a satisfactory manner and make them available to the Department upon request. (R 336.1225, R 336.1702(a))

4. The permittee shall keep, in a satisfactory manner, records of the amount of butyl cellosolve used in EUOFFFIRSTRINSE each calendar month and 12-month rolling time period as determined at the end of each calendar month, as required by SC II.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1225, R 336.1702(a))

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGENVENT1	56	28	R 336.1225,
			40 CFR 52.21(c) & (d)
2. SVGENVENT2	56	28	R 336.1225,
			40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FGFACILITY CONDITIONS

DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment.

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario Equipment		Monitoring / Testing Method	Underlying Applicable Requirements
_				Equipment		
1.	Each	Less than 9.0	12-month rolling time	FGFACILITY	SC VI.2	R 336.1205(3)
	Individual	tpy	period as determined at			
	HAP		the end of each calendar			
			month			
2.	Aggregate	Less than 22.5	12-month rolling time	FGFACILITY	SC VI.2	R 336.1205(3)
	HAPs	tpy	period as determined at			
			the end of each calendar			
			month			
3.	VOC	Less than 80.0	12-month rolling time	FGFACILITY	SC VI.3	R 336.1205(3),
		tpy	period as determined at			R 336.1702
			the end of each calendar			
			month			

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- The HAP content of any material received in the totes shall be determined based on the results of the sampling study carried out during 2019, included in the PTI as Appendix A. The HAP content for any material used to clean the totes shall be determined using manufacturer's formulation data. Upon request of the AQD District Supervisor the permittee shall perform another sampling study on the HAP content of the material received in the totes. Additionally, upon request of the AQD District Supervisor, the manufacturer's HAP formulation data shall be verified using EPA Test Method 311. (R 336.1205(3))
- 2. The permittee shall determine the VOC content of any material, as received, and as applied, using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the permittee may determine the VOC content from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the permittee shall use the Method 24 results to determine compliance. (R 336.1205(3))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205(3))**
- 2. The permittee shall keep the following information on a monthly basis for FGFACILITY:
 - a) Gallons or pounds of each HAP containing material used.
 - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
 - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - e) Individual and aggregate HAP emission calculations determining the cumulative emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(3))

- 3. The permittee shall keep the following information on a monthly basis for FGFACILITY:
 - a) Gallons or pounds of each VOC containing material used.
 - b) Where applicable, gallons or pounds of each VOC containing material reclaimed.
 - c) VOC content, in pounds per gallon or pounds per pound, of each VOC containing material used.
 - d) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - e) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative method and format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request (**R 336.1205(3)**)

VII. <u>REPORTING</u>

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

APPENDIX A

Heel Waste Samples Analytical Results Summary January 16, 2019 (from Appendix D of PTI Application)

		Sample 1 Concentration (wt%)	Sample 2 Concentration (wt%)	Sample 3 Concentration (wt%)	Average Concentration (wt%)	Average Volatiles Concentration Normalized to
Compound	CAS					100% (wt%)
Water	7732-18-5	23.00	24.00	30.00	25.67	46.39
Propyl Propionate	106-36-5	0.09	0.00	0.00	0.03	0.05
Methyl Isobutyl Ketone	108-10-1	0.05	0.07	0.67	0.26	0.48
Toluene	108-88-3	0.20	0.45	4.34	1.66	3.01
Methyl Amyl Ketone	110-43-0	0.63	0.22	2.71	1.19	2.14
Ethylene Glycol Monobutyl Ether	111-76-2	2.55	2.72	13.10	6.12	11.07
2-hexyloxyethanol	112-25-4	0.47	0.35	1.84	0.89	1.60
Butyl Acetate	123-86-4	1.04	0.70	2.25	1.33	2.40
Heptane	142-82-5	0.24	0.12	0.00	0.12	0.22
Polypropylene Glycol	25322-69-4	0.06	0.00	0.29	0.12	0.21
N-butoxypropanol	5131-66-8	0.00	0.25	1.29	0.51	0.93
Propionic Acid, n-butyl ester	590-01-2	0.61	0.05	1.17	0.61	1.10
Hydrotreated Heavy Naphtha	64742-48-9	0.21	0.05	0.00	0.09	0.16
Aromatic Hydrocarbon	64742-95-6	11.08	6.00	21.99	13.02	23.54
Isopropyl alcohol	67-63-0	0.58	0.46	1.25	0.76	1.38
N-butanol	71-36-3	1.21	0.79	0.67	0.89	1.61
Isobutyl alcohol	78-83-1	0.30	0.21	2.96	1.16	2.09
Methyl pyrrolidone	872-50-4	0.13	0.55	0.46	0.38	0.69
1,2,4-trimethylbenzene	95-63-6	1.21	0.00	0.00	0.40	0.73
Cumene	98-82-8	0.31	0.00	0.00	0.10	0.19
Non-Volatile Residue	-	56.00	63.00	15.00	44.67	-
	Totals:	99.97	99.99	99.99	99.98	100.0