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

August 26, 2019

PERMIT TO INSTALL 21-01C

> ISSUED TO Aristo Cote, Inc.

# LOCATED AT

24951 Henry B Joy Boulevard Harrison Township, Michigan 48045

IN THE COUNTY OF

Macomb

# STATE REGISTRATION NUMBER N6938

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:

# August 23, 2019

DATE PERMIT TO INSTALL APPROVED: August 26, 2019	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

# PERMIT TO INSTALL

# **Table of Contents**

COMMON ACRONYMS	2
POLLUTANT / MEASUREMENT ABBREVIATIONS	3
GENERAL CONDITIONS	4
EMISSION UNIT SPECIAL CONDITIONS	6
EMISSION UNIT SUMMARY TABLE	6
EU-PlasmaWest	7
FLEXIBLE GROUP SPECIAL CONDITIONS	9
FLEXIBLE GROUP SUMMARY TABLE	9
FG-All-Lns	10
FGFACILITY CONDITIONS	13

# **COMMON ACRONYMS**

AQD BACT CAA CAM CEMS CFR COMS Department/department/EGLE EU FG GACS GC GHGS HVLP ID IRSL ITSL LAER MACT MAERS MAP MSDS NA NAAQS NESHAP NSPS NSR PS PSD PTE PTI RACT ROP SC SCR SCR SCR SNCR SRN TBD TEQ USEPA/EPA VE	Air Quality Division Best Available Control Technology Clean Air Act Compliance Assurance Monitoring Continuous Emission Monitoring System Code of Federal Regulations Continuous Opacity Monitoring System Michigan Department of Environment, Great Lakes, and Energy Emission Unit Flexible Group Gallons of Applied Coating Solids General Condition Greenhouse Gases High Volume Low Pressure* Identification Initial Risk Screening Level Initial Threshold Screening Level Lowest Achievable Emission Rate Maximum Achievable Control Technology Michigan Air Emissions Reporting System Malfunction Abatement Plan Material Safety Data Sheet Not Applicable National Ambient Air Quality Standards National Emission Standard for Hazardous Air Pollutants New Source Performance Standards New Source Review Performance Specification Prevention of Significant Deterioration Permanent Total Enclosure Permit to Install Reasonable Available Control Technology Renewable Operating Permit Special Condition Selective Catalytic Reduction State Registration Number To Be Determined Toxicity Equivalence Quotient United States Environmental Protection Agency Visible Emissions
VE	VISIDIE ETTISSIONS

# POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm BTU °C CO CO <sub>2</sub> e dscf dscm	Actual cubic feet per minute British Thermal Unit Degrees Celsius Carbon Monoxide Carbon Dioxide Equivalent Dry standard cubic foot Dry standard cubic meter
°F	Degrees Fahrenheit
gr HAP	Grains Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H <sub>2</sub> S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO <sub>x</sub>	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 Parts per million
ppm	Parts per million by volume
ppmv 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 <sub>2</sub>	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
μg	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.

Aristo Cote, Inc. (N6938) Permit No. 21-01C

- 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.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control	Installation Date /	Elevitele Oneur ID
Emission Unit ID EU-Ln-01	Device(s)) Metallic Surface Coating Line No. 1:	Modification Date May 2013	Flexible Group ID FG-All-Lns
	HVLP gun(s), one spray booth. Air dry. All associated purge and clean-up operations.		
EU-Ln-02	Metallic Surface Coating Line No. 2: HVLP gun(s), one spray booth. Air dry. All associated purge and clean-up operations.	May 2013	FG-All-Lns
EU-Ln-03	Metallic Surface Coating Line No. 3: HVLP gun(s), one spray booth. Air dry. All associated purge and clean-up operations.	May 2013	FG-All-Lns
EU-Ln-04	Metallic Surface Coating Line No. 4: HVLP gun(s), one spray booth. Air dry. All associated purge and clean-up operations.	May 2013	FG-All-Lns
EU-PlasmaWest	Robotic plasma steel cutting station with a horizontal pickup duct with slotted hood close to the cutting point, and a large canopy hood over the entire robot and cutting area. Emissions from the cutting point are controlled by a cyclone dust collector with filter assembly.	May 2019	NA

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.

# EU-PlasmaWest FLEXIBLE GROUP CONDITIONS

#### DESCRIPTION

Robotic plasma steel cutting station with a horizontal pickup duct with slotted hood close to the cutting point, and a large canopy hood over the entire robot and cutting area. Emissions from the cutting point are controlled by a cyclone dust collector with filter assembly.

#### Flexible Group: NA

#### POLLUTION CONTROL EQUIPMENT

Emissions from the cutting points are controlled by cyclone dust collectors with filter assembly.

#### I. EMISSION LIMIT(S)

1. Visible emissions from EU-PlasmaWest shall not exceed a six-minute average of 5 percent opacity. (R 336.1301, R 336.1331)

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-PlasmaWest for more than 20 hours per calendar day. (R 336.1224, R 336.1225)

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

 The permittee shall not operate EU-PlasmaWest unless the cyclone dust collectors with filter assembly on the cutting points are installed, maintained, and operated in a satisfactory manner. (R 336.1224, R 336.1225, R 336.1331, R 336.1910)

#### 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))

- The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor on a continuous basis and record, a minimum of once per calendar day (when operating), the pressure drop on the cyclone dust collectors with filter assembly. (R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)
- The permittee shall monitor particulate emissions by taking visible emission readings, or checking for abnormal visible emissions, a minimum of once per week (when operating) from each stack in EU-PlasmaWest. Either a certified reader or a non-certified observer shall take each visible emission reading or check during routine operating conditions. If abnormal visible emissions are observed, the permittee shall implement corrective actions. (R 336.1301, R 336.1331, R 336.1910)

Aristo Cote, Inc. (N6938) Permit No. 21-01C

- 3. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1224, R 336.1225)
- 4. The permittee shall keep, in a satisfactory manner, a log of the operating hours for EU-PlasmaWest. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225)
- The permittee shall keep, in a satisfactory manner, records of the daily pressure drop readings for the cyclone dust collectors with filter assembly portions of EU-PlasmaWest. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225)
- 6. The permittee shall keep, in a satisfactory manner, records of all visible emission readings or observations for EU-PlasmaWest. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, status of visible emissions, and any corrective action taken if necessary. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1301, R 336.1331)

## 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. SV-2West	18	32.7	R 336.1225, 40 CFR 52.21(c) & (d)
2. SV-3West	30	31.8	R 336.1225, 40 CFR 52.21(c) & (d)
3. SV-4West	16	31.3	R 336.1225, 40 CFR 52.21(c) & (d)
Note: The cyclone dust c	ollectors with filter assembly	are vented internally	· · · · · ·

## IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>1</sup> 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
FG-All-Lns	Metallic Surface Coating Line Nos. 1, 2, 3, and 4 - EU- Ln-01, EU-Ln-02, EU-Ln-03, and EU-Ln-04.	EU-Ln-01, EU-Ln-02, EU-Ln-03, EU-Ln-04

# FG-All-Lns FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

Metallic Surface Coating Line Nos. 1, 2, 3, and 4 - EU-Ln-01, EU-Ln-02, EU-Ln-03, and EU-Ln-04.

Emission Unit: EU-Ln-01, EU-Ln-02, EU-Ln-03, EU-Ln-04

#### POLLUTION CONTROL EQUIPMENT

Each spray booth is equipped with dry filters to control particulate emissions. No control equipment for VOC emissions.

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOCs	30.0 tpy	12-month rolling time period as determined at the end of each calendar month	FG-All-Lns	SC VI.2 SC VI.3	R 336.1205(3), R 336.1702(a)

#### II. MATERIAL LIMIT(S)

	Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.	VOCs	3.5 lb/gal (minus water)* as applied	Instantaneous	FG-All-Lns	SC V.1	R 336.1702(a)
*	* The phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. (R 336.1602(4))					

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall recover and reclaim, recycle, or dispose of waste, in accordance with all applicable regulations. (R 336.1225, R 336.1702(a))
- The permittee shall capture all waste paint, coating, thinner, purge and clean-up solvents, etc. (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))
- 3. The permittee shall dispose of spent filters in a manner which minimizes the introduction of air contaminants to the outer air. (R 336.1224, R 336.1370)
- The permittee shall handle all VOC containing materials, including coatings, reducers, solvents and thinners, 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 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate FG-All-Lns unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. (R 336.1224, R 336.1301, R 336.1331, R 336.1910)
- The permittee shall equip and maintain each spray booth portion of FG-All-Lns with HVLP applicators or comparable technology with equivalent transfer efficiency. For HVLP applicators, the permittee shall keep test caps available for pressure testing. (R 336.1702(a))

#### V. TESTING/SAMPLING

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

The permittee shall determine the VOC content, water content and density of any material, as applied and as received, 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), R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5)

#### VI. MONITORING/RECORDKEEPING

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

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(3), R 336.1224, R 336.1225, R 336.1702(a))
- The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, 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 for a period of at least five years and make them available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a))
- 3. The permittee shall keep the following information on a calendar month basis for FG-All-Lns:
  - a) Gallons (with water) of each material used.
  - b) VOC content (minus water and with water) of each material as applied.
  - 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(3), 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. SV-Ln-01	36	43	R 336.1225,
			40 CFR 52.21(c) & (d)
2. SV-Ln-02	36	43	R 336.1225,
			40 CFR 52.21(c) & (d)
3. SV-Ln-03	36	43	R 336.1225,
			40 CFR 52.21(c) & (d)
4. SV-Ln-04	36	43	R 336.1225,
			40 CFR 52.21(c) & (d)

# IX. OTHER REQUIREMENT(S)

NA

# Footnotes:

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

# **FGFACILITY CONDITIONS**

**<u>DESCRIPTION</u>**: 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)

NA

#### II. MATERIAL LIMIT(S)

1. The permittee shall use only non-HAP material (as received and as applied). (R 336.1205(3))

#### 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))

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/records in a format acceptable to the AQD District Supervisor by the 15<sup>th</sup> 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 calendar month basis for FGFACILITY:

Appropriate record to show compliance with SC II.1. For each coating, reducer, purge and Clean-up solvent, thinner, etc. (material) used, the records shall include the safety data sheets (SDS), Environmental Data Sheets (EDS), or manufacturer's formulation data, or all as deemed acceptable by the AQD District Supervisor.

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:

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