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

January 27, 2020

PERMIT TO INSTALL
221-00C

ISSUED TO
Plastic Plate, Inc.

LOCATED AT
1648 Monroe Avenue
Grand Rapids, Michigan

IN THE COUNTY OF
Kent

STATE REGISTRATION NUMBER
B6138

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: **December 11, 2019**	
DATE PERMIT TO INSTALL APPROVED: **January 27, 2020**	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

Table of Contents

COMMON ACRONYMS

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

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H_2S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO_x	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
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.

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 Device(s))	Installation Date / Modification Date	Flexible Group ID
EU-CHROME	One chrome etch tank (3 bays), two decorative chrome plating tanks, one purification tank and one evaporator/reclaim unit.	March 1974	FG-PLATINGLINE
EU-CATALYST	One catalyst tank (2 bays) and one accelerator tank (1 bay).	March 1974	FG-PLATINGLINE
EU-ELECTROLESS	Electroless copper or electroless nickel process consisting of one tank (up to 4 bays).	March 1974	FG-PLATINGLINE
EU-NITRICSTRIP	One nitric acid strip tank (2 bays).	March 1974	FG-PLATINGLINE
EU-NICKELPLATE	Exempt nickel plating tanks including two satin nickel tanks, three semi-bright nickel tanks (6 bays), two bright nickel tanks (2 bays each), and one particle nickel tank.	March 1974	FG-PLATINGLINE
EU-CONDITIONER	One tank used to condition the plastic parts prior to plating.	March 1974	FG-PLATINGLINE
EU-PREETCHTANK	One tank used to pre-etch plastic parts prior to plating.	TBD	

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-CHROME
EMISSION UNIT CONDITIONS

DESCRIPTION

One chrome etch tank (3 bays), two decorative chrome plating tanks, one purification tank and one evaporator/reclaim unit.

Flexible Group ID: FG-PLATINGLINE

POLLUTION CONTROL EQUIPMENT

Composite mesh pad scrubber

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Total Chromium	0.0005 pph	Test Method	EU-CHROME	GC 13, FG-PLATINGLINE SC VI.1, SC VI.2, SC VI.3, SC VI.4, SC VI.5	R 336.1225, R 336.1901

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-CHROME unless the chemical fume suppressant is applied in quantities and at a frequency to ensure the surface tension of each decorative chromium plating tank does not exceed 45 dynes/cm (3.1x10-3 pound-force per foot) at any time during operation. **(R 336.1224, R 336.1225, R 336.1901, R 336.1910, 40 CFR Part 63 Subpart N)**

2. Permittee shall not operate EU-CHROME unless the composite mesh pad scrubber is operating properly. **(R 336.1224, R 336.1225, R 336.1901, R 336.1910, 40 CFR Part 63 Subpart N)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip EU-CHROME with a composite mesh pad scrubber. **(R 336.1224, R 336.1225, R 336.1901, 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))**

NA

VII. REPORTING

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. SV1	36	62	R 336.1225, R 336.1901

IX. OTHER REQUIREMENT(S)

1. NA

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

EU-CATALYST
EMISSION UNIT CONDITIONS

DESCRIPTION

One catalyst tank (2 bays) and one accelerator tank (1 bay).

Flexible Group ID: FG-PLATINGLINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

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))**

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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. SV2	30	36	R 336.1225, R 336.1901

IX. OTHER REQUIREMENT(S)

NA

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

EU-ELECTROLESS
EMISSION UNIT CONDITIONS

DESCRIPTION

Electroless copper or electroless nickel process consisting of one tank (up to 4 bays).

Flexible Group ID: FG-PLATINGLINE

POLLUTION CONTROL EQUIPMENT

Packed bed scrubber with a mist eliminator

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Nickel	0.00166 pph	Test Method	EU-ELECTROLESS	GC 13, FG-PLATINGLINE SC VI.2, SC VI.3	R 336.1225, R 336.1901
2. Ammonia	3.5 pph	Test Method	EU-ELECTROLESS	GC 13, FG-PLATINGLINE SC VI.2, VI.3	R336.1225, R336.1901
3. Formaldehyde	0.0862 pph	Test Method	EU-ELECTROLESS	GC 13, FG-PLATINGLINE SC VI.2, VI.3	R336.1225, R336.1901
4. Methanol[a]	4.8 pph	Test Method	EU-ELECTROLESS	GC 13, FG-PLATINGLINE SC VI.2, VI.3	R 336.1205, R336.1225, R336.1901
[a]Methanol is emitted during copper plating in EU-ELECTROLESS					

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate EU-ELECTROLESS unless the packed bed scrubber with a mist eliminator is operating properly. **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

2. The permittee shall not operate EU-ELECTROLESS to apply electroless copper for more than 3,700 hours per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip EU-ELECTROLESS with a packed bed scrubber with a mist eliminator. **(R 336.1224, R 336.1225, R 336.1901, 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))**

1. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the number of hours EU-ELECTROLESS is operated to apply electroless copper. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1205)**

VII. REPORTING

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. SV3	30	49.5	R 336.1225, R 336.1901

IX. OTHER REQUIREMENT(S)

NA

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

EU-NITRICSTRIP
EMISSION UNIT CONDITIONS

DESCRIPTION

One nitric acid strip tank (2 bays).

Flexible Group ID: FG-PLATINGLINE

POLLUTION CONTROL EQUIPMENT

Packed bed scrubber with a mist eliminator

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Nitric Acid	0.28 pph	Test Method	EU-NITRICSTRIP	GC 13, FG-PLATINGLINE SC VI.2, SC VI.3	R 336.1225, R 336.1901

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate EU-NITRICSTRIP unless the packed bed scrubber with a mist eliminator is operating properly. **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. Permittee shall equip EU-NITRICSTRIP with a packed bed scrubber with a mist eliminator. **(R 336.1224, R 336.1225, R 336.1901, 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))**

NA

VII. REPORTING

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. SV4	36	36	R 336.1225, R 336.1901

IX. OTHER REQUIREMENT(S)

NA

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

EU-NICKELPLATE
EMISSION UNIT CONDITIONS

DESCRIPTION

Exempt nickel plating tanks including two satin nickel tanks, three semi-bright nickel tanks (6 bays), two bright nickel tanks (2 bays each), and one particle nickel tank.

Flexible Group ID: FG-PLATINGLINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Nickel	0.00027 pph	Test Method	EU-NICKELPLATE	GC 13	R 336.1225, R 336.1901
2. Formaldehyde	0.019 pph	Test Method	EU-NICKELPLATE	GC 13	R 336.1225, R 336.1901

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))**

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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:

NA

IX. OTHER REQUIREMENT(S)

NA

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

EU-CONDITIONER
EMISSION UNIT CONDITIONS

DESCRIPTION

One tank used to condition the plastic parts prior to plating.

Flexible Group ID: FG-PLATINGLINE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. 1,3-dichloro-2-propanol	0.75 pph	Test Method	EU-CONDITIONER	GC 13	R 336.1901
2. 1,3-dichloro-2-propanol	2 tpy	12-month rolling time period as determined at the end of each calendar month	EU-CONDITIONER	FG-PLATINGLINE SC VI.6	R 336.1702 R 336.1901

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))**

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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).

EU-PREETCHTANK
EMISSION UNIT CONDITIONS

DESCRIPTION

One tank used to pre-etch plastic parts prior to plating.

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. VOCs	222.5 lbs per year	12-month rolling time period as determined at the end of each calendar month	EU-PREETCHTANK	SC VI.1, SC VI.2	R 336.1225, R 336.1702(a)

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))**

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep a record, in a manner acceptable to the AQD District Supervisor, of the composition of all additives used in EU-PREETCHTANK and of the maximum concentration in the tank of all components of the additives that are VOCs. **(R 336.1702(a))**

2. The permittee shall calculate the VOC emission rate from EU-PREETCHTANK on a monthly and 12-month rolling basis using aeration calculation methods such as Equation 4 from AP-42 chapter 12.20 or an alternate method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EU-PREETCHTANK. **(R 336.1201(7)(a))**

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:

NA

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
FG-PLATINGLINE	Plastic parts plating line	EU-CHROME, EU-ELECTROLESS, EU-CATALYST, EU-NITRICSTRIP, EU-NICKELPLATE, EU-CONDITIONER

FG-PLATINGLINE
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Plastic parts plating line

Emission Unit: EU-CHROME, EU-ELECTROLESS, EU-CATALYST, EU-NITRICSTRIP, EU-NICKELPLATE, EU-CONDITIONER

POLLUTION CONTROL EQUIPMENT

I. EMISSION LIMIT(S)

1. Visible emissions from FG-PLATINGLINE shall not exceed 0 percent opacity except for uncombined water vapor. **(R 336.1301, R 336.1331)**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Permittee shall not operate FG-PLATINGLINE until approvable final plans and specifications for operation and maintenance including start-up, shutdown, and malfunction plan of the controls have been submitted to and approved by the District Supervisor, Air Quality Division. The plans shall also include a standardized checklist to document the operation and maintenance of the controls which addresses a systematic procedure for identifying malfunctions reporting process to the supervisors and other actions to be followed to ensure that the controls or process malfunctions due to poor maintenance or other preventable conditions do not occur. **(R 336.1911, 40 CFR Part 63 Subpart N)**

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. When using chemical fume suppressant with a wetting agent in the decorative chromium plating tanks, the operator shall measure the surface tension of each of the decorative chromium plating tanks according to an approvable operation and maintenance (O & M) plan as submitted to the District Supervisor, Air Quality Division, to ensure that the surface tension of each of the decorative chromium plating tanks/baths shall not exceed 45 dynes/cm (3.1xE-3 lbf/ft). **(R 336.1225, 40 CFR Part 63 Subpart N)**

2. On a quarterly basis, the operator shall visually inspect each emission control scrubber to check proper drainage, to ensure that there is no chemical build-up on the packed beds and/or mesh pads, and that the structural integrity is sound. **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**

3. Operator shall perform inspections of controls as follows: **(R 336.1224, R 336.1225, R 336.1901, R 336.1910)**
   a) Inspection of the packed bed mist eliminator, duct work and/or mesh pads shall be conducted quarterly.
   b) Wash down of the mesh pads shall be conducted in accordance with the manufacturer's recommendations.
   c) If a pressure drop across the air pollution control device varies by (+/-) 2 inches of water gauge per control device, from the pressure drop determined during initial testing, the variation shall be documented, and the operation and maintenance procedures shall be reviewed. Any corrective action shall be documented.

4. Permittee shall maintain records of inspections required to comply with applicable Work Practice Standards of 40 CFR 63.342(f). The permittee shall keep all records on file at the facility and make them available to the Air Quality Division upon request. **(R 336.1225, 40 CFR Part 63 Subpart N)**

5. Monitoring and recording of emissions, and operating and maintenance information is required to comply with the National Emission Standards for Hazardous Air Pollutants (NESHAPs) as specified in 40 CFR, Part 63, Subparts A and N. The permittee shall keep all source emissions data, operating, and maintenance data on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, 40 CFR Part 63 Subpart N)**

6. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the hours of operation of FG-PLATINGLINE. All records are for the purpose of compliance demonstration. The permittee shall keep all records on file at the facility and make them available to the Department upon request.[1] **(R 336.1225)**

VII. REPORTING

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:

NA

IX. OTHER REQUIREMENT(S)

NA

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