STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Industrial Connections & Solutions LLC **Androscoggin County** **Auburn, Maine** **A-152-71-K-R/A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal / Amendment**

FINDINGS OF FACT

After review of the air emission license renewal and amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Industrial Connections & Solutions LLC (ICS), a subsidiary of General Electric Company, has applied to renew its Air Emission License for the operation of emission sources associated with its electroplating and metal finishing facility.

ICS has also requested an amendment to its license in order to change the legal name of the facility, as the facility was formerly licensed as General Electric Company; to license Boilers #1 and #2 to only fire natural gas; to remove fuel limits on the External Combustion Sources; to license two previously installed Make-up Air Units, Make-up Air Units A and B. to remove Line 9; and to introduce VOC emission limits for Aerosol Can Painting.

The equipment addressed in this license is located at 135 Rodman Road, Auburn, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

External Combustion Sources

Equipment	Max. Capacity (MMBtu/hr)	Fuel Type, % sulfur	Maximum Firing Rate	Date of Manuf.	Date of Install.	Stack #
Boiler #1	10.5	Natural Gas, Negl. sulfur	10,461 scf/hr	1975	1975	1
Boiler #2	10.5	Natural Gas, Negl. Sulfur	10,461 scf/hr	1975	1975	2

Equipment	Max. Capacity (MMBtu/hr)	Fuel Type, % sulfur	Maximum Firing Rate	Date of Manuf.	Date of Install.	Stack #
Make-up Air Unit #3	1.9	Natural Gas, Negl. Sulfur	1,860 scf/hr	1984	1984	NA
Make-up Air Unit #4	2.6	Natural Gas, Negl. Sulfur	2,629 scf/hr	1984	1984	NA
Make-up Air Unit #5	2.7	Natural Gas, Negl. Sulfur	2,650 scf/hr	1984	1984	NA
Make-up Air Unit #6	2.6	Natural Gas, Negl. Sulfur	2,644 scf/hr	1984	1984	NA
Make-up Air Unit #7	2.8	Natural Gas, Negl. Sulfur	2,800 scf/hr	1984	1984	NA
Make-up Air Unit A	1.9	Natural Gas, Negl. Sulfur	1925scf/hr	1984	1984	NA
Make-up Air Unit B	6.1	Natural Gas, Negl. Sulfur	6050 scf/hr	1984	1984	NA
Heat Treat Unit #8	0.65	Propane, Negl. Sulfur	6.9 gal/hr	1982	1982	13

Generator

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (kW)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Generator #1	4.3	500	Distillate Fuel, 0.0015% sulfur by weight	31.2	2016	2016

Process Lines

Equipment	Line Type	Equipment	Pollutant(s)	Stack #	Control Device(s)
Line 1	Zinc Barrel	Tanks 6, 7, 13, 20-25	PM, Cr, HCl	9	Scrubber #4
Line 2	Tin/Copper Barrel	Tanks 2, 9, 23-25, 28-30	VOC, PM, CN, H_2SO_4	9	Scrubber #4
Line 3	Tin/Copper Barrel	Tanks 2, 20-22, 26-31	VOC, CN, H_2SO_4	6,8,10	Scrubbers #1,3,5

Equipment	Line Type	Equipment	Pollutant(s)	Stack #	Control Device(s)
Line 4	Tin/Copper Rack	Tanks 7-9, 13-15, 17	VOC, CN, H_2SO_4	6,8,10	Scrubbers #1,3,5
Line 5	Silver Rack	Tanks 7, 15, 12	CN, H_2SO_4	6,8	Scrubbers #1,3
Line 6	Zinc Rack	Tanks 7, 11, 15, 17	PM, Cr, HCl	8	Scrubber #3
Line 7	Tin/Silver Small Manual Dip	Tanks 5, 8, 13, 17, 18-20	HCl, CN, H_2SO_4	6,8	Scrubbers #1,3
Line 8	Tin/Silver/Nickle Large Manual Dip	Tanks 7, 8, 11, 12, 20-21, 24-28	PM, HCl, CN, H_2SO_4	6,7	Scrubbers #1,2
Line 10	Tin/Silver/Nickle Rack	Tanks 9, 19-24, 29-34, 35	PM, CN, H_2SO_4	24, 25	Scrubbers #6,7
Acid Dip	Acid Etch	Tanks 4, 5	HCl, H_2SO_4	7	Scrubber #2

Other Process Equipment

Equipment	Type of Equipment	Maximum Process Rate	Date of Installation	Stack #	Control Device
Molten Salt Bath	Molten Salt Bath	25 lbs/hr	1983	14	Mist Eliminator
Heat Treat Mineral Oil Quench	Heat Treat Oven	100 lbs/hr	1981	13	Oil Mist Separator

C. Definitions

Distillate Fuel. For the purposes of this license, *distillate fuel* means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

D. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for ICS does not include the installation of new equipment; however it does include a name change, the removal of a process line, the conversion of fuels, the removal of fuel limits, and a subsequent change in emissions from the fuel conversion and fuel limit removal.
General Electric Company (GE) has elected to change the legal entity name of this facility from General Electric Company to Industrial Connections & Solutions LLC. GE remains the parent company of this facility. Because this constitutes a name change only and is not a transfer of ownership, no air emission license transfer is required. This name change is considered to be the identification of an administrative change per 06-096 C.M.R. ch. 115 § 5.A.(2) and is hereby incorporated as a minor revision to the facility's license.

The process changes, as result of the removal of the annual fuel use limit on the External Combustion Sources, cause an increase of more 4 tons per year for CO in licensed emissions and therefore require an amendment.

Based on the administrative change and the process changes, the license is considered to be a renewal of currently licensed emission units and an amendment, and it has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

The facility is licensed below the major source thresholds for criteria pollutants and is considered a minor source of criteria air pollutants. The facility is also licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	6.9	5.7	- 1.2	100
PM_{10}	6.9	5.7	- 1.5	100
SO_2	26.7	0.1	- 26.6	100
NO_x	24.6	17.5	- 7.1	100
CO	6.5	14.3	+ 7.8	100
VOC	3.7	3.0	- 0.7	50

This modification is determined to be a minor modification and has been processed as such.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Process Description

ICS is part of the Energy Services Division of GE. The main function of the facility is the fabrication of metal parts used in electrical distribution. ICS manufactures over 5,000 parts primarily from aluminum, copper, and steel. The process includes metal finishing and electroplating.

The first step in the process is forming the metal part into the desired shape and configuration. When complete, most parts are sent to the plating room where there are ten process lines used in the plating process. The plating lines have a series of as many as thirty separate chambers consisting of different chemical solutions. Some parts are manually dipped in baths, while others are dipped in automated lines.

The two basic forms of plating are barrel and rack. In barrel plating, the parts are loaded into a screen type barrel and then the barrels are dipped in specific programmed sequences to process the parts. In rack plating, the parts are actually hung on a rack and then dipped in the baths in programmed sequences to process the parts.

It is the plating process that is the major source of process air emissions. Many gaseous compounds are emitted from the baths, such as cyanide compounds, sulfuric acid, alcohol, metallic compounds, hydrochloric acid, and hydrogen peroxide. The exhaust is sent to wet scrubbers. ICS maintains seven scrubbers to treat bath exhaust. Two of the scrubbers are designated specifically to remove cyanide compounds, and the remaining

five treat all other chemical gases. After the parts are plated, they are air dried and packaged for shipment. Minimal assembly is done at the Auburn facility.

Other air emissions sources in the facility include two natural gas fired boilers for facility heat and hot water, a distillate fuel fired emergency generator, molten salt bath etch, an electric heat treat oven that uses propane for annealing, two electric heated weld/braze furnaces, four propane infrared heaters, propane fork trucks, welding, brazing and cutting operations, glass bead blasting, wastewater treatment, various chemical storage tanks, aqueous parts washers, a laboratory, and seven natural gas fired make up air units.

C. External Combustion Sources

ICS operates Boilers #1 and #2 for facility hot water and heating. The boilers are each rated at 10.5 MMBtu/hr, and they fire natural gas. The boilers were both installed in 1975, and they exhaust through their own stacks.

ICS also operates Make-up Air Units #3-7, A, and B for building heat and one Heat Treat Unit for their production process. The make-up air units are rated at 1.9 MMBtu/hr, 2.6 MMBtu/hr, 2.7 MMBtu/hr, 2.6 MMBtu/hr, 2.8 MMBtu/hr, 1.9 MMBtu/hr, and 6.1 MMBtu/hr, respectively, and all fire natural gas. Heat Treat Unit #8 fires propane and is rated at 0.65 MMBtu/hr. It is below the minimum licensing threshold of 06-096 C.M.R. ch. 115 for external combustion sources and is therefore exempt from further inclusion in this license.

1. BPT Findings

In license A-152-71-J-R, dated 05/19/2010, The BPT emission limits for the boilers were based on the firing of natural gas and #2 fuel oil. ICS has ceased the firing of #2 fuel oil in the boilers and has requested that the boilers only be licensed for burning natural gas. The BPT emission limits for the boilers and natural gas-fired make-up air units are therefore based on the following emission factors:

Natural Gas

PM/PM_{10}	0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT For Boilers #1 and #2, and Make-up Air Unit B
	7.6 lb/MMscf from AP-42 Table 1.4-2, dated 7/98 For the Make-up Air Units
SO_2	0.6 lb/MMscf from AP-42 Table 1.4-2, dated 7/98
NO_x	100 lb/MMscf from AP-42 Table 1.4-1, dated 7/98
CO	84 lb/MMscf from AP-42 Table 1.4-1, dated 7/98

VOC	5.5 lb/MMscf from AP-42 Table 1.4-2, dated 7/98
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the boilers and make-up air units are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.05
Boiler #2	PM	0.05
Make-up Air Unit B	PM	0.05

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 Natural gas	0.53	0.53	0.01	1.05	0.88	0.06
Boiler #2 Natural gas	0.53	0.53	0.01	1.05	0.88	0.06
Make-up Air Unit #3 Natural gas	0.01	0.01	Negligible	0.19	0.16	0.01
Make-up Air Unit #4 Natural gas	0.02	0.02	Negligible	0.26	0.22	0.01
Make-up Air Unit #5 Natural gas	0.02	0.02	Negligible	0.27	0.22	0.01
Make-up Air Unit #6 Natural gas	0.02	0.02	Negligible	0.26	0.22	0.01
Make-up Air Unit #7 Natural gas	0.02	0.02	Negligible	0.28	0.24	0.02
Make-up Air Unit A Natural gas	0.01	0.01	Negligible	0.19	0.016	0.01
Make-up Air Unit B Natural gas	0.14	0.14	Negligible	0.28	0.24	0.02

Visible Emissions

Visible emissions from each of the boilers and make-up air units shall not exceed 10% opacity on a six-minute block average basis.

Fuel Limits

ICS, in license A-152-71-J-R, dated 05/19/2010, had annual fuel limits of 100 MMscf of natural gas and 750,000 gallons of distillate fuel on a 12-month rolling total basis. These limits were established to keep ICS below the applicability thresholds for *Emission Statements,* 06-096 C.M.R. ch. 137. Because ICS is now only licensed to fire the cleaner fuel, natural gas, in the boilers, the facility has requested the removal

of the natural gas fuel limit along with the conversion. A removal of both fuel limits would result in annual criteria air pollutants limits that remain below applicability thresholds for 06-096 C.M.R. ch. 137. The Department has determined that the removal of fuel limits will allow for operational flexibility without allowing significant increases in annual emission limits and represents BPT for the External Combustion Sources.

2. Periodic Monitoring

   Periodic monitoring for Boilers #1 and #2 shall include recordkeeping to document the type of fuel used, as the boilers are licensed to fire natural gas only, even though both have dual-fuel firing capability. ICS shall demonstrate compliance with this condition by maintaining records of fuel purchases on a calendar year basis.

3. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

   Due to the year of manufacture of the boilers, neither is subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

   Due to the sizes of the makeup air units, none are subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

4. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

   None of ICS' external combustion sources are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. [40 C.F.R. §§63.11193 and 63.11195]

   Gas-fired boilers are exempt from 40 C.F.R. Part 63, Subpart JJJJJJ. However, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 C.F.R. § 63.11237]

   Any boiler designed to burn fuels besides gaseous fuels prior to June 4, 2010, will be considered an existing boiler under this rule. A boiler which currently fires gaseous fuels, but converts back to firing another fuel (such as distillate fuel) in the future would become subject as an existing boiler at the time it is converted back to oil.

D. Generator #1

ICS operates one generator, Generator #1. Generator #1 is a generator set consisting of an engine and an electrical generator. The emergency generator has an engine rated at 4.3 MMBtu/hr, and it fires distillate fuel. Generator #1 was manufactured in 2016 and was installed in 2017.

1. BPT findings

The BPT emission limits for the generator are based on the following:

Distillate Fuel

PM/PM_{10}	0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
SO_2	0.0015 lb/MMBtu based on the combustion of distillate fuel with a maximum sulfur content of 0.0015% sulfur by weight
NO_x	3.2 lb/MMBtu from AP-42 Table 3.4-1, dated 10/96
CO	0.85 lb/MMBtu from AP-42 Table 3.4-1, dated 10/96
VOC	0.09 lb/MMBtu from AP-42 Table 3.4-1, dated 10/96
Visible Emissions	06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Generator #1 are the following:

Unit	Pollutant	lb/MMBtu
Generator #1	PM	0.12

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (4.3 MMBtu/hr) distillate fuel	0.52	0.52	0.01	13.76	3.66	0.39

Visible Emissions

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis.

2. 40 C.F.R. Part 60, Subpart IIII

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to the emergency engine listed above since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or

equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

b. 40 C.F.R. Part 60, Subpart IIII Requirements

(1) Manufacturer Certification Requirement
The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement
The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
[40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements
The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by ICS that are approved by the engine manufacturer. ICS may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(5) Annual Time Limit for Maintenance and Testing
As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100

hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement
No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping
ICS shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as emergency, and the number of hours the unit operated for non-emergency purposes. [40 C.F.R. § 60.4214(b)]

E. Process Equipment

1. Plating Lines

ICS operates ten plating lines as part of the facility's metal fabrication process. The plating lines have a series of separate chambers consisting of different chemical solutions. Fabricated parts are dipped in plating baths using hoists either manually or with automated lines. Gaseous compounds are emitted from this process including cyanide compounds, sulfuric acid, alcohol, metallic compounds, hydrochloric acid, and hydrogen peroxide.

Duct work along the top sides of the plating baths capture emissions from the ten plating lines. The exhaust from each line is sent to one of seven wet scrubbers that ICS operates. The wet scrubbers have an estimated rated efficiency of at least 85% control. In 2017, ICS conducted an air emissions inventory and estimated potential emissions from the plating lines. Potential emissions estimates were based on emission factors from AP-42 section 12.20 for electroplating processes and Raoult's Law. The calculated emissions were estimated to be below minimum licensing thresholds for VOC and HAP, per 06-096 C.M.R. ch. 115, Appendix B. Therefore, ICS' use of wet scrubbers represents BPT for plating bath emissions.

a. 40 C.F.R. Part 63, Subpart WWWWWW

National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations, 40 C.F.R. Part 63, Subpart WWWWWW, is applicable to ICS's electroplating process. 40 C.F.R. Part 63, Subpart WWWWWW provides operation standards and management practices for the plating lines and subsequent reporting and recordkeeping requirements for the facility.

The following are requirements of 40 C.F.R. Part 63, Subpart WWWWWW:

(1) Standards and Management Practices

(a) ICS shall utilize one of the three following compliance methods for all process lines that contain one or more plating and polishing metal HAP[1] and operate at a pH of less than 12:

(i) The use of a wetting agent/fume suppressant in the bath of the affected tank. The wetting agent/fume suppressant shall be added in the amounts recommended by the manufacturer for each electrolytic process. It must also be added in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that of the original make-up of the bath. If, however, the wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/flume suppressants to the tank to comply with the rule.

(ii) Capture and exhaust emissions from each affected tank to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator. The capture and control devices shall be operated according to the manufacturer's specifications and operating instructions which shall be kept at the facility at all times in a location where they can be easily accessed by the operator.

[1] 40 C.F.R. § 63.11511 defines Plating and polishing metal HAP as the metals at the level specified in the following table.

Metal	Amount Needed to Qualify
Cadmium	Elemental form or >0.1% by weight
Chromium	Elemental form or >0.1% by weight
Lead	>0.1% by weight
Manganese	Elemental form or >1.0% by weight
Nickel	Elemental form or >0.1% by weight

(iii) Cover the entire effective surface area of batch electrolytic process tanks for at least 95% of the electrolytic process operating time, and cover at least 75% of the surface of continuous electrolytic process tanks at all times the tank is in operation.

[40 C.F.R. § 63.11507(a)]

ICS operates seven packed bed scrubbers to demonstrate compliance with this subpart. The remainder of the requirements will be listed for compliance via the use of a control system.

(b) ICS shall implement the following applicable management practices for all process lines that contain, apply, or emit any of the plating and polishing metal HAP:

(i) Minimize bath agitation when removing any parts processed in the tank, as practicable, except when necessary to meet the part quality requirements.

(ii) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(iii) Optimize the design barrels, racks and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(iv) Use tank covers, if already owned and available at the facility, whenever practicable.

(v) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(vi) Perform regular repair, maintenance, and preventative maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(vii) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(viii) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(ix) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(x) Minimize spills and overflow of tanks, as practicable.

(xi) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(xii) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

[40 C.F.R. § 63.11507(g)]

(2) Compliance Requirements

To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, ICS shall satisfy the following requirements:

(a) ICS must always operate and maintain the affected source, including air pollution control equipment, in a manner consistent with the requirements of this subpart.

(b) ICS shall operate and maintain the control systems according to the manufacturer's specifications and instructions. The operating instructions shall be kept at the facility at all times in a location where they can be easily accessed by the operators.

(c) Following any malfunction or failure of the control device to operate properly, ICS must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.

(d) ICS shall implement the applicable management practices during all times that the affected process line is in operation.

(e) ICS shall state in its annual compliance certification that it has implemented the applicable management practices, as practicable, and that the controls have been operated according to the manufacturer's specifications and instructions.

(f) ICS must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

(g) ICS shall meet all applicable compliance requirements for the chosen method of compliance if it decides to switch from the add-on control compliance method.
[40 C.F.R. § 63.11508(c) and (d)]

(3) Notification, Reporting, and Recordkeeping Requirements

(a) ICS was required to submit an Initial Notification of Compliance. ICS submitted the required Initial Notification on October 14, 2008.
[40 C.F.R. § 63.11509(a)]

(b) ICS was required to submit a Notification of Compliance Status (NOCS). ICS submitted the required NOCS on November 14, 2011.

If ICS makes changes to any of the required items in its NOCS, an amended NOCS shall be submitted within 30 days of the change.
[40 C.F.R. § 63.11507(b)]

(c) ICS shall prepare an annual certification of compliance report. The reports do not need to be submitted unless a deviation from the requirements of the subpart has occurred during the reporting year. The annual reports shall be prepared according to the following requirements:

(i) ICS shall state that the control system has been operated according to the manufacturer's specifications and instructions.

(ii) ICS shall state that the applicable management practices have been implemented, as practicable, as defined in § 63.11507(g) and summarized in section (a)(2) for subpart WWWWWW in this license.

(iii) Each annual compliance report shall be prepared no later than January 31 of the year immediately following the reporting period.

(iv) Each annual compliance report shall be kept in a readily-accessible location for inspector review.

(v) If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. The deviation report must include the deviation, along with the corrective action taken, and must be submitted to the Department.
[40 C.F.R. § 63.11509(c), (d)]

(d) ICS shall keep the following records:

(i) A copy of the facility's Initial Notification and NOCS, along with any supporting documents.

(ii) The records specified in § 63.10(b)(2)(i) of the General Provisions for 40 C.F.R. Part 63.

(iii) The records required to show continuous compliance with each management practice and equipment standard that applied to the facility, as outlined in § 63.11508(d).
[40 C.F.R. § 63.11509(e)]

(e) ICS shall keep each record required by this subpart for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. All records must be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record; and may be kept offsite for the remaining 3 years.
[40 C.F.R. § 63.11507(a)]

b. Scrubbers BPT Requirements

ICS shall meet the following requirements for all scrubbers:

(1) ICS shall operate the scrubbers to achieve a removal efficiency of at least 85%;

(2) ICS shall continuously operate the scrubbers to control emissions from the plating lines at all times that the associated plating lines are in operation;

(3) ICS shall maintain pressure drop indicators across each of the scrubbers. The pressure differential shall be maintained within an optimal operating range as recommended by the manufacturer. The pressure drop on each scrubber shall be measured and recorded once per day for each day the associated plating line or lines are in operation;

(4) ICS shall measure and record daily the recycled water pH in each of the remote circulation systems. Recycled water pH shall be maintained at optimal levels as recommended by the manufacturer; and

(5) Upon request from the Department, ICS shall test the scrubbers' efficiencies to demonstrate compliance with the minimum 85% removal efficiency and operate the scrubbers at the parameters with which compliance is demonstrated.

[06-096 C.M.R. ch. 115, BPT]

2. Heat Treat Oven

ICS uses a propane-fired Heat Treat Oven for annealing of fabricated pieces during the process. The oven is rated at 0.65 MMBtu, firing propane and it uses mineral oil as a quenching fluid (rapid cooling). The Heat Treat Oven falls below the minimum licensing threshold for fuel burning; however, it has the potential to emit VOC above the minimum licensing threshold with the use of quenching fluid.

ICS shall meet the following conditions for the Heat Treat Oven:

a. VOC emissions from the use of quench oil in the Heat Treat Oven shall not exceed 1 ton per year on a calendar year total basis. [06-096 C.M.R. ch. 115, BPT]

b. ICS shall demonstrate compliance with this limit by utilizing the following mass balance equations, or another method, as approved by the Department [06-096 C.M.R. ch.115, BPT]:

$$VOC\ emissions = (A - B) * X$$

Where,

A = Amount of quenching fluid purchased each calendar year
B = Amount of quenching fluid shipped offsite each calendar year
X = VOC content of quenching fluid each calendar year

c. VOC emissions from the quench fluid shall be calculated and documented on a calendar year basis. [06-096 C.M.R. ch. 115, BPT]

3. Brazing, Welding, Metalworking, and Tool Room

ICS performs brazing and welding, and has a variety of screw machine lathes and robodrills in the main manufacturing area and performs other, miscellaneous metalwork within the Tool Room.
Emissions from the main manufacturing area are controlled by electrostatic precipitators (Smog-Hogs) that exhaust back into the building. The Smog-Hogs have a conservative particulate emission reduction efficiency of 90% and control oil mist and VOCs.

ICS uses a cyclone dust collection system to control emissions from the Tool Room area. The cyclone has an overall control efficiency of 80%.

Based on an emissions inventory completed in 2017, emissions from these sources do not have potential emissions above minimum licensing thresholds. These operations are also considered categorically exempt pursuant to 06-096 C.M.R. ch. 115 Appendix B § A(34).

4. Blasting Operations

ICS operates several varieties of abrasive blasters, including glass bead, barrel, and shot peen blasters. Emissions from blasting operations are not controlled; however they are completed inside.

Based on an emissions inventory completed in 2017, emissions from these sources do not have potential emissions above minimum licensing thresholds. These operations are also considered categorically exempt pursuant to 06-096 C.M.R. ch. 115 Appendix B § A(58).

5. Aerosol Can Painting

ICS utilizes aerosol cans for maintenance painting activities in its process. The total can usage is tracked by the facility. Although these are non-refillable aerosol cans, these activities have the potential to exceed emissions of 100 lb VOC per year and are therefore not exempt under 06-09 C.M.R. ch. 115, Appendix B § B(17).

ICS shall meet the following requirements for the Aerosol Can Painting operations:

a. VOC emissions from Aerosol Can Painting operations shall not exceed 1 ton per year on a calendar year basis. [06-096 C.M.R. ch. 115, BPT]

b. ICS shall demonstrate compliance with this limit by utilizing the following mass balance equation for each paint, or by using another method, as approved by the Department [06-096 C.M.R. ch.115, BPT]:

$$VOC\ emissions = (A - B) * X$$

Where,

A = Amount of applicable paint purchased each calendar year
B = Amount of applicable paint shipped offsite each calendar year
X = VOC content of the applicable paint each calendar year

c. VOC emissions from the Aerosol Paint Cans shall be calculated and documented on a calendar year basis. [06-096 C.M.R. ch. 115, BPT]

F. Parts Washers

ICS utilizes 11 parts washers to clean various small parts. The parts washers all have capacities of 6.4-6.7 gallons and contain solvents that are 100% VOC. The parts washers are therefore all subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance.

G. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

H. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

I. Annual Emissions

1. Total Annual Emissions

ICS shall be restricted to the following annual emissions on a calendar year total basis. The tons per year limits were calculated based on 8760 hours of operation of each External Combustion Source, 100 hours of operation of Generator #1, and 2.0 tons per year of VOC emissions from process sources.

Total Licensed Annual Emissions for the Facility
Tons/year
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boiler #1 and #2	4.60	4.60	0.06	9.20	7.73	0.51
Make-up Air Units	1.10	1.10	0.05	7.58	6.37	0.42
Generator #1	0.03	0.03	--	0.69	0.18	0.02
Process Emissions						2.00
Total TPY	**5.7**	**5.7**	**0.1**	**17.5**	**14.3**	**3.0**

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

The quantity of CO_2e emissions from this facility is less than 100,000 tons per year, based on the following:

- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting,* 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM_{10}	25
SO_2	50
NO_x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-152-71-K-R/A subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 C.M.R. ch. 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 C.M.R. ch. 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 C.M.R. ch. 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 C.M.R. ch. 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 C.M.R. ch. 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
   1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or
   2. Pursuant to any other requirement of this license to perform stack testing.

B. Install or make provisions to install test ports that meet the criteria of 40 C.F.R. Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 C.M.R. ch. 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 C.M.R. ch. 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(16) External Combustion Sources

A. Fuel

1. Boilers #1 and #2 shall only fire natural gas [06-096 C.M.R. ch. 115, BPT]
2. Make-up Air Units #3-7, A, and B shall all only fire natural gas [06-096 C.M.R. ch 115, BPT]
3. ICS shall demonstrate compliance with this condition by maintaining records of fuel purchases on a calendar year basis. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.05	06-096 C.M.R. ch. 115, BPT
Boiler #2	PM	0.05	06-096 C.M.R. ch. 115, BPT
Make-up Air Unit B	PM	0.05	06-096 C.M.R. ch. 115, BPT

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 Natural gas	0.53	0.53	0.01	1.05	0.88	0.06
Boiler #2 Natural gas	0.53	0.53	0.01	1.05	0.88	0.06
Make-up Air Unit #3 Natural gas	0.01	0.01	–	0.19	0.16	0.01
Make-up Air Unit #4 Natural gas	0.02	0.02	–	0.26	0.22	0.01
Make-up Air Unit #5 Natural gas	0.02	0.02	–	0.27	0.22	0.01
Make-up Air Unit #6 Natural gas	0.02	0.02	–	0.26	0.22	0.01
Make-up Air Unit #7 Natural gas	0.02	0.02	–	0.28	0.24	0.02
Make-up Air Unit A Natural gas	0.01	0.01	–	0.19	0.016	0.01
Make-up Air Unit B Natural gas	0.14	0.14	–	0.28	0.24	0.02

D. Visible emissions from each boiler and make-up air unit shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(17) **Generator #1**

A. Generator #1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 (4.3 MMBtu/hr) distillate fuel	0.52	0.52	0.01	13.76	3.66	0.39

D. Visible emissions from Generator #1 not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

E. Generator #1 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:

1. Manufacturer Certification
   The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in §60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Fuel
   The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115]

3. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing
   a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115]

   b. ICS shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance
   The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or procedures developed by ICS that are approved by the engine manufacturer. ICS may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(18) **Process Emissions**

A. Plating Lines

ICS shall meet all applicable requirements contained in *National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*, 40 C.F.R. Part 63, Subpart WWWWWW, including the following:

1. Standards and Management Practices

   a. ICS shall utilize <u>one</u> of the three following compliance methods for all process lines that contain one or more plating and polishing metal HAP[2] and operate at a pH of less than 12:

[2] 40 C.F.R. § 63.11511 defines Plating and polishing metal HAP as the metals at the level specified in the following table.

Metal	Amount Needed to Qualify
Cadmium	Elemental form or >0.1% by weight
Chromium	Elemental form or >0.1% by weight
Lead	>0.1% by weight
Manganese	Elemental form or >1.0% by weight
Nickel	Elemental form or >0.1% by weight

(1) The use of a wetting agent/fume suppressant in the bath of the affected tank. The wetting agent/fume suppressant shall be added in the amounts recommended by the manufacturer for each electrolytic process. It must also be added in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that the of the original make-up of the bath. If, however, the wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/flume suppressants to the tank to comply with the rule.

(2) Capture and exhaust emissions from each affected tank to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator. The capture and control devices shall be operated according to the manufacturer's specifications and operating instructions which shall be kept at the facility at all times in a location where they can be easily accessed by the operator.

(3) Cover the entire effective surface area of batch electrolytic process tanks for at least 95% of the electrolytic process operating time and cover at least 75% of the surface of continuous electrolytic process tanks at all times the tank is in operation.

[40 C.F.R. § 63.11507(a)]

ICS operates seven packed bed scrubbers to demonstrate compliance with this subpart. The remainder of the requirements will be listed for compliance via the use of a control system.

b. ICS shall implement the following applicable management practices for all process lines that contain, apply, or emit any of the plating and polishing metal HAP:

(1) Minimize bath agitation when removing any parts processed in the tank, as practicable, except when necessary to meet the part quality requirements.

(2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.

(3) Optimize the design barrels, racks and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.

(4) Use tank covers, if already owned and available at the facility, whenever practicable.

(5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).

(6) Perform regular repair, maintenance, and preventative maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.

(7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/deionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.

(8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.

(9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

(10) Minimize spills and overflow of tanks, as practicable.

(11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.

(12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

[40 C.F.R. § 63.11507(g)]

2. Compliance Requirements

To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, ICS shall satisfy the following requirements:

a. ICS must always operate and maintain the affected source, including air pollution control equipment, in a manner consistent with the requirements of this subpart.

b. ICS shall operate and maintain the control systems according to the manufacturer's specifications and instructions. The operating instructions shall be kept at the facility at all times in a location where they can be easily accessed by the operators.

c. Following any malfunction or failure of the control device to operate properly, ICS must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.

d. ICS shall implement the applicable management practices during all times that the affected process line is in operation.

e. ICS shall state in its annual compliance certification that it has implemented the applicable management practices, as practicable, and that the controls have been operated according to the manufacturer's specifications and instructions

f. ICS must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.

g. ICS shall meet all applicable compliance requirements for the chosen method of compliance if it decides to switch from the add-on control compliance method.

[40 C.F.R. § 63.11508(c) and (d)]

3. Notification, Reporting, and Recordkeeping Requirements

a. If ICS makes changes to any of the required items in its NOCS (submitted November 14, 2011), an amended NOCS shall be submitted within 30 days of the change.
[40 C.F.R. § 63.11507(b)]

b. ICS shall prepare an annual certification of compliance report. The reports do not need to be submitted unless a deviation from the requirements of the subpart has occurred during the reporting year. The annual reports shall be prepared according to the following requirements:

(1) ICS shall state that the control system has been operated according to the manufacturer's specifications and instructions.

(2) ICS shall state that the applicable management practices have been implemented, as practicable, as defined in § 63.11507(g) and summarized in section (a)(2) for subpart WWWWWW in this license.

(3) Each annual compliance report shall be prepared no later than January 31 of the year immediately following the reporting period.

(4) Each annual compliance report shall be kept in a readily-accessible location for inspector review.

(5) If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. The deviation report must include the deviation, along with the corrective action taken, and must be submitted to the Department.

[40 C.F.R. § 63.11509(c), (d)]

c. ICS shall keep the following records:

(1) A copy of the facility's Initial Notification and NOCS, along with any supporting documents.

(2) The records specified in § 63.10(b)(2)(i) of the General Provisions for 40 C.F.R. Part 63.

(3) The records required to show continuous compliance with each management practice and equipment standard that applied to the facility, as outlined in § 63.11508(d) and summarized in section (b)(1-8) for subpart WWWWWW in this license.

[40 C.F.R. § 63.11509(e)]

d. ICS shall keep each record required by this subpart for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. All records must be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record; and may be kept offsite for the remaining 3 years.
[40 C.F.R. § 63.11507(a)]

B. Scrubbers [06-096 C.M.R. ch. 115, BPT]:

1. ICS shall operate the Scrubbers to achieve a removal efficiency of at least 85%;

2. ICS shall continuously operate the scrubbers to control emissions from the plating lines at all times that the associated plating lines are in operation;

3. ICS shall maintain pressure drop indicators across each of the scrubbers. The pressure differential shall be maintained within an optimal operating rage as recommended by the manufacturer. The pressure drop on each scrubber shall be

measured and recorded once per day for each day the associated plating line or lines are in operation;

4. ICS shall measure and record daily the recycled water pH in each of the remote circulation systems. Recycled water pH shall be maintained at optimal levels as recommended by the manufacturer; and

5. Upon request from the Department, ICS shall test the scrubbers' efficiencies to demonstrate compliance with the minimum 85% removal efficiency and operate the scrubbers at the parameters with which compliance is demonstrated.

C. Heat Treat Oven [06-096 C.M.R. ch. 115, BPT]

1. VOC emissions from the use of quench oil in the Heat Treat Oven shall not exceed 1 ton per year on a calendar year total basis.

2. ICS shall demonstrate compliance with this limit by utilizing the following mass balance equations, or another method, as approved by the Department:

$$VOC\ emissions = (A - B) * X$$

Where,

A = Amount of quenching fluid purchased each calendar year
B = Amount of quenching fluid shipped offsite each calendar year
X = VOC content of quenching fluid each calendar year

3. VOC emissions from the quenching fluid shall be calculated and documented on a calendar year basis.

D. Aerosol Can Painting [06-096 C.M.R. ch. 115, BPT]

1. VOC emissions from Aerosol Can Painting operations shall not exceed 1 ton per year on a calendar year basis.

2. ICS shall demonstrate compliance with this limit by utilizing the following mass balance equation for each paint, or by using another method, as approved by the Department:

$$VOC\ emissions = (A - B) * X$$

Where,

A = Amount of applicable paint purchased each calendar year
B = Amount of applicable paint shipped offsite each calendar year
X = VOC content of the applicable paint each calendar year

3. VOC emissions from the Aerosol Paint Cans shall be calculated and documented on a calendar year basis.

(19) **Parts Washers**

Parts washers at GE are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

A. ICS shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
   1. Solvent cleaners using less than two liters (68 oz.) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
   2. Wipe cleaning; and,
   3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.

   1. ICS shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
      a. Waste solvent shall be collected and stored in closed containers.
      b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
      c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
      d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
      e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
      f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
      g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
      h. Work area fans shall not blow across the opening of the parts washer unit.
      i. The solvent level shall not exceed the fill line.

   2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 C.M.R. ch. 130]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BPT]

(21) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(22) ICS shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605).

DONE AND DATED IN AUGUSTA, MAINE THIS 26 DAY OF September , 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PAUL MERCER, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 01/21/2015
Date of application acceptance: 02/04/2015

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.