

TECHNICAL SUPPORT DOCUMENT
For
DRAFT/PROPOSED AIR EMISSION PERMIT NO. 05300319-002

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

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 3471)
Avtec Finishing Systems Inc 9101 Science Center Dr New Hope, MN 55428	Avtec Finishing Systems Inc 9101 Science Center Dr New Hope Hennepin County
Contact: Bill Palmer Environmental Manager Phone: 763-533-4822	Contact: Bill Palmer Environmental Manager Phone: 763-533-4822

1.2 Facility Description

Avtec Finishing Systems is a metal finishing job shop. The primary finishes offered are anodizing and dying aluminum parts; passivate die cast zinc, aluminum and steel parts; electroless nickel plating on steel, copper and aluminum parts, and electro polishing in a stainless steel part. Customers are primarily in the aerospace, electronics, and other commercial industries.

The facility consists of a degreaser, 11 plating/anodizing lines with a total of 98 bath tanks, where some qualify as insignificant activities based on the quantity of emissions generated of hexavalent and trivalent chromium, nickel and cyanides compounds and hydrochloric acid, however some tanks are not considered insignificant activities and are included in the body of the permit (Group 12). Some metal parts are painted using less than 250gallon/year of paint.

The permit action is a reissuance of the Part 70 operating permit. The facility is a major source of HAPs, and is subject to the NESHAP for Halogenated Solvent Cleaning because the Permittee operates a degreaser with a total concentration in Trichloroethylene greater than 5 percent by weight.

1.3 Description of any Changes Allowed with this Permit Issuance

No changes are authorized by this permit.

1.4 Facility Emissions:

Table 2. Total Facility Potential to Emit Summary

	PM tpy	PM ₁₀ tpy	PM _{2.5} tpy	VOC tpy	Trichloro- ethylene	All HAPs tpy
Total Facility Limited Potential Emissions	1.30	1.30	1.30	54.17	54.17	55.47
Total Facility Actual Emissions (2009)	0.92	0.92	0.92	4.50	*	*

*Not reported in MN emission inventory

Table 3. Facility Classification

Classification	Major/Affected Source	Synthetic Minor/Area	Minor/Area
PSD			X
Part 70 Permit Program	X		
Part 63 NESHAP	X		

1.5 Changes to Permit

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

- Updated to reflect current MPCA templates and standard citation formatting.
- Updated total facility requirements to reflect current MPCA Policy.
- Create GP012 that includes all the tanks that are not insignificant activities.
- Updated Subpart T NESHAP for Halogenated Solvent Cleaning language.
- Updated the insignificant activities list.

2. **Regulatory and/or Statutory Basis**

New Source Review

The facility is an existing non-major source under New Source Review regulations. No changes are authorized by this permit.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program, due to potential HAP emissions in excess of 10 tons per year (tpy) for a single HAP and 25 tpy for total HAPs.

New Source Performance Standards (NSPS)

There are no New Source Performance Standards applicable to the operations at this facility.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is a major source under 40 CFR pt. 63 for a single HAP (Trichloroethylene) and other HAPs (Chromium, Nickel and Cyanide compounds, and Hydrochloric Acid). The facility's degreaser is subject to 40 CFR 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning.

None of the plating lines at the facility is subject to 40 CFR 63, Subpart N, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. The tanks containing chromium solutions are chrome conversion tanks; no electric current is applied. Therefore 40 CFR § 63.340(b), Subpart N does not apply.

The parts are painted by hand and by using a very low capacity spray gun. The total usage of HAP containing coatings is less than 250gallon/year, therefore Subpart M, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, 40 CFR § 63.3880-63.3981 does not apply.

Compliance Assurance Monitoring (CAM)

The facility is not subject to CAM because there is no add on controls to meet the limit requirements for GP012.

Environmental Review & AERA

No changes are proposed at Avtec therefore Environmental Review is not required.

Minnesota State Rules

Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

Table 4. Regulatory Overview of Facility

Level*	Applicable Regulations	Comments:
EU001	40 CFR §63, Subpart T	National Emission Standards for Halogenated Solvent Cleaning
GP012	Minn. R. 7011.0715	Standards of Performance post 1969 Industrial Process Equipment. Each group emits less than 0.30 grains/dry standard cubic foot limit.

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD contains a detailed spreadsheet and supporting information prepared by the Permittee, audited and approved by the MPCA.

Potential emissions from plating tanks are calculated by using a concentration of the reagent in the tank and % loss of solution.

Degreaser calculations were done by the Permittee using the equations indicated at 40 CFR § 63.465(e). The combustion source potential emissions are calculated based on U.S. EPA AP-42, Section 1.4 for Natural Gas Combustion.

Volatile Organic Compounds (VOC) and particulate matter (PM) for coating operations are based on mass balance considering the application rate of the material, transfer rate of the gun, capture efficiency of paint booth filters, and assuming that spray gun operate at maximum capacity. The PTE is the highest emission rate of VOC and PM given the coatings available

3.2 Periodic Monitoring

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

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

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

Table 5 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 5. Periodic Monitoring

Level*	Emission limit (Basis)	Additional Monitoring	Discussion
Degreaser: EU001	40 CFR §63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning	No	NESHAP requirements are considered adequate monitoring.
Tank lines: GP012	PM, variable depending on airflow or Opacity $\leq 20\%$ (Minn.R.7011.0715)	No	The emissions from plating lines are not 100% captured and exhausted through a defined stack because some may escape through doors and other openings. Overall the likelihood of violation either of the emission is very small based on their actual emissions.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.3 Insignificant Activities

Avtec Finishing Systems has several tanks which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix I to the permit. The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility using the criteria listed down below.

Table 7. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
Minn.R.7007.1300 subp.3 (I),subp.4, subp.5 2-11, 13-15,17-21,23-31, 35-39, 45-47, 49, 50, 52-57, 70, 72, 73, 75-78, 80, 81, 83, , 85-86, 94-125.	Less than 2.28 lb/h for PM, PM ₁₀ , SO ₂ , NO _x , VOC; 25% or less of 0.002, 5, 1, 5 and 10 tpy for Cr ⁶⁺ , Cr ³⁺ , Ni, CN, HCl.	Potential emissions of all those tanks are lower than the emission limit.
Emissions from a laboratory, as defined in Minn. R. 7007.1300, subp. 3(G)	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0710/715)	These are very small, intermittent, bench-top operations that typically do not even have any emissions. It is highly unlikely that they could violate the applicable requirement.
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0710/715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Cleaning operations: alkaline/phosphate cleaners and associated cleaners and associated burners	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0610 Minn. R. 7011.0710/715)	For these units, there are some factors available for the burners, but very little information regarding the cleaning operation itself. However, based on general knowledge of how they operate, it is highly unlikely that they could violate the applicable requirement or that testing would be feasible.
Paint booth potential emissions less than 2000lb/year and 4000lb/year of certain pollutants.	PM, PM ₁₀ , SO ₂ , NO _x , VOC and ozone; Minn.R.7007.1300 subp.3 (I)	Company uses an average of a cup of paint-solvent a day. If company exceeds 250 gallons of paint usage, they will be subject to NESHAP Subp. MMMM.

Insignificant Activity	General Applicable Emission limit	Discussion
Individual boilers with potential emissions less than 2000lb/year, 4000lb/year and 1000tpy of certain pollutants.	CO, PM, PM ₁₀ , SO ₂ , NO _x , VOC and ozone, and CO _{2e} . Minn.R.7007.1300 subp.3 (I)	The three boilers PTE don't exceed the potential to emit threshold.

3.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be electronically tracked (e.g., limits, submittals, etc.), should be in Table A or B of the permit. The main reason is that the appendices are word processing sections and are not part of the electronic tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

3.5 Comments Received

This section will be completed after the referenced review periods.

Public Notice Period: <start date> - <end date>

EPA 45-day Review Period: <start date> - <end date>

4. Permit Fee Assessment

This permit action is the reissuance of an individual Part 70; therefore, no application fees apply under Minn. R. 7002.0016, subp. 1.

5. Conclusion

Based on the information provided by Avtec Finishing Systems, Inc, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 05300319-002 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Hortensia Salcedo Abad (permit writer/engineer)
Brent Rohne (enforcement)
Marc Severin (stack testing)
Toni Volkmeier (peer reviewer)

AQ File No. 1923; DQ 3313

Attachments: 1. PTE Summary and Calculation Spreadsheets
2. Facility Description
3. CD-01 Forms

Attachment 1:

PTE Summary and Calculation Spreadsheets

AYTEC FINISHING, INC.
Emissions Calculations

AQ Facility ID No: 05300319

Q-#	EU ID	STACK VENT ID	Emissions Calculations				MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons) ¹	Make Up (pounds) ¹	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons ¹	Actual Hours of Operation (hours)	PTE Tons/Yr
			Q-Line	Passivate	Hot D.I. Cleaner	Water											
Q-1	EU-119	SV 008(O)	Passivate Cleaner 1		Hot D.I. Cleaner	New Dimension Supreme	Acetone High Greeting		VOC	2.2	22.5	5	9	5	0.0000	2080	0.0000
Q-2	EU-120	SV 008(O)	Passivate Pre-dip		Sodium Hydroxide	Sodium Hydroxide	EEH - Metal cleaning, Alkaline Cleaning		PM10	0.57	21	50	12	5	0.0003	2080	0.0011
Q-3	EU-121	SV 008(O)	Passivate Noval		Cleaner	Noval	EEH - Metal cleaning, Alkaline Cleaning		VOC, GE		26	10	8	5	0.0001	2080	0.0003
Q-5	EU-122	SV 002(M)	Passivate Dichromate Nitric		Dichromate	Sodium Dichromate	EEH Electroplating Acid/Chromium		Chronic Acid, PM10		12	100		5	0.0003	2080	0.0013
Q-5	EU-123	SV 002(M)	Passivate Dichromate Nitric		Nitric Acid	Nitric Acid	EEH Stripping, Nickel		NOx, PM10	1	11.75	71	11.75	5	0.0002	2080	0.0009
Q-10	EU-124	SV 002(M)	Passivate Nitric		Nitric Acid	Nitric Acid	EEH Stripping, Nickel		NOx, PM10	1.3	152.75	71	11.75	5	0.0027	2080	0.0114
Q-11	EU-125	SV 002(M)	Passivate Nitric		Nitric Acid	Nitric Acid	EEH Stripping, Nickel		NOx, PM10	11.5	135.125	71	11.75	5	0.0024	2080	0.0101

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0053	
VOC	0.0001	
GE		yes
PM ₁₀ , PM _{2.5}	0.0059	
Chromium Compounds		yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0234	
VOC	0.0004	
GE		yes
PM ₁₀ , PM _{2.5}	0.0248	
Chromium Compounds		yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

AVTEC FINISHING, INC.
Emissions Calculations
Boilers (3 x 20 horsepower)
Natural Gas (<100MMBtu/hr)
Air Emissions

AO Facility ID No: 05300319
(EU 116, EU 117, EU 118)

Enter Btu/hr maximum heat input
heat value of natural gas is 1050 Btu/scf

Btu/hr X 1 ft³/1050 Btu
ft³/hr

1590.476

13932571.43

ft³/year

ft³/hr X 8760 hr/yr

per boiler

Potential Emissions											
B	C	D	E	F	G	H	I	J	K	L	M
ft ³ burned/yr natural gas	SO ₂ sulfur dioxide ton/yr B X .000006 / 2000 0.00	NO _x nitrogen oxides ton/yr B X .0001 / 2000 0.70	VOC volatile organic compounds ton/yr B X .0000055 / 2000 0.04	CO carbon monoxide ton/yr B X .000084 / 2000 0.59	PM particulate matter ton/yr B X .0000076 / 2000 0.05	PM ₁₀ particulate matter < 10 microns ton/yr B X .0000076 / 2000 0.05	Lead ton/year B X .000000005 / 2000 0.00000	CO ₂ carbon dioxide GHG ton/yr B X EF / 2000 836	N ₂ O nitrous oxide GHG ton/yr B X EF / 2000 0	CH ₄ methane GHG ton/yr B X EF / 2000 0	GHG Total (CO ₂ e) green house gas total (carbon dioxide equivalent) ton/yr (J'GWp) + (K'GWp) + (L'GWp)
13932571.43	0.00	0.70	0.04	0.59	0.05	0.05	0.00	835.95	0.00	0.02	836.79
Total PTE	0.01	2.09	0.11	1.76	0.16	0.16	0.00	2507.86	0.00	0.05	2510.37
Permit Thresholds	50	100	100	100	100	25	0.5	na	na	na	100,000
Insignificant Activity	1	1	1	2	1	1	na	na	na	na	1,000

Insignificant Activity from MIN Rule 7007.1300, subp. 3, I

CO ₂	N ₂ O	CH ₄
0.12	74 FR 209,130 Oct 2009, pp. 56409-56410	0.000000231
1	GWp - Global Warming Potential (from IPCC form EC-17)	0.00000231
		21

AVTEC FINISHING, INC.
PTE Calculations

Table 2: PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	3.72	
VOC	56.05	
GE	0.07	yes
PM, PM ₁₀ , PM _{2.5}	9.72	
HCl	0.82	yes
Ni Compound	1.95	yes
Cyanide Compound	0.24	yes
Chromium Compounds	0.09	yes
Trichloroethylene	54.17	yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons) ¹	Make Up (pounds) ¹	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons ¹	Actual Hours of Operation (hours)	PTE Tons/Yr
A-0	EU099	SV 008(O)	Potassium Permanganate	Potassium Permanganate	EEH-Surface Treatment- Descaling	NOX		261	10	2.5	5	0.00731	4160	0.02001
A-1	EU010	SV 008(O)	Ni(OH) ₂ Sodium Metasilicate, Disodium phosphate, DGMEL surfactant	NUTVAT	EEH - Metal Cleaning (Alkaline Cleaning)	VOC, GE		1105	10		5	0.0028	4160	0.0076
A-3a			Nickel 1 - Cold Rinse									0.0000	4160	0.0000
A-3b			Nickel 1 - Cold Rinse									0.0000	4160	
A-4	EU011	SV 008(O)	HCl	HCl	EEH- Pickling (Nickel)	HCl	927	8954.92	37	9.66	5	0.0828	4160	0.2258
A-5a			Nickel 1 - Cold Rinse					0				0.0000	4160	0.0000
A-5b			Nickel 1 - Cold Rinse					0				0.0000	4160	0.0000
A-6	EU 012	SV 002(M)	Nickel Sulfate	Nickel Sulfate	Explate example cakes	Ni, PM ₁₀	1393	15100.12	25	10.84	5	0.0944	4160	0.2584
			Lactic Acid, Malic Acid, Sodium Hypophosphite	NIKLAD 808 HA	Explate example cakes	VOC	1533	16984.236	18	10.492	5	0.0724	4160	0.1981
A-7	EU 013	SV 002(M)	Nickel Sulfate	Nickel Sulfate	Explate example cakes	Ni, PM ₁₀	427	4487.77	25	10.51	5	0.0280	4160	0.0768
			Lactic Acid, Malic Acid, Sodium Hypophosphite	Niklad 821 H	Explate example cakes	VOC	867	9398.28	18	10.84	5	0.0423	4160	0.1158
A-8	EU 014	SV 002(M)	Nitric Acid	Nitric Acid	EEH- Nickel Stripping	NOX, PM10	167	1962.25	71	11.75	5	0.0348	4160	0.0953
A-9	EU 015	SV 002(M)	Nitric Acid	Nitric Acid	EEH- Nickel Stripping	NOX, PM10	167	1962.25	71	11.75	5	0.0348	4160	0.0953
A-10	EU 016	SV 002(M)	Ni	Ni	Assume High Gassing	Ni, PM10	325	4062.5	100	12.5	5	0.1016	4160	0.2780
A-11	EU 017	SV 002(M)	Nitric Acid	Nitric Acid	EEH- Nickel Stripping	NOX, PM10	0	0	71	11.16	3	0.0032	4160	0.0087
A-17	EU 018	SV 002(M)	Liquid Nickel Chloride	LIQUID NICKEL CHLORIDE	Explate example cakes	Ni, PM ₁₀	61.4	685.224	31	11.16	3	0.0034	4160	0.0092
			HCl	HCl	Explate example cakes	HCl	61.4	608.474	37	9.91	3	0.0000	4160	#DIV/0!
A-15			Nickel 1 - Cold Rinse											
A-19	EU 090	SV 002(M)	Tetrapotassium pyrophosphate	Nistan SF Make up	Explate example cakes	Ni, PM ₁₀	247	2420.6	3	9.8	3	0.0011	48	0.2584
A-16	EU 091	SV 002(M)	Butyl Carbitol, Naphthenic Oil, Sodium Sulfonate	LAB OIL 100	Assume High Gassing	Butyl Carbitol VOC, GE	19	147.25	10	7.75	5	0.0004	460	0.0091
A-23	EU 092	SV 002(M)	Nitric acid,Phosphoric acid,acetic acid	Brie-dip	EEH- Nickel Stripping EEH- Nickel Stripping	HN03, PM10 NOx, PM10	50 50	587.5 587.5	71	11.75 11.75	5 5	0.0104 0.0038	4160 4160	0.0285 0.0103

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOX	0.0807	
VOC	0.1178	
GE	0.0031	yes
PM ₁₀ , PM _{2.5}	0.3125	
HCl	0.0862	yes
Ni Compound	0.2286	yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOX	0.2210	
VOC	0.3306	
GE	0.0167	yes
PM ₁₀ , PM _{2.5}	1.1189	
HCl	0.2360	yes
Ni Compound	0.5894	yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

Table 4: B-Line- Nickel 2

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr
B-3	EU 002	SV 002 (M)	Nickel 2 - Acid Etch	H2SO4, Phosphoric Acid Nitric Acid H2SO4 Nitric Acid	EEH- Nickel Stripping	H2SO4, PM10	248	2430.4	60	9.8	5	0.0365	2080	0.1996
B-4	EU 003	SV 002 (M)	Nickel 2 - Deoxidizer		EEH- Nickel Stripping	NOX, PM10	280	3290	71	11.75	5	0.0584	2080	0.3197
B-6	EU 004	SV 008 (O)	Nitric Acid		EEH- Nickel Stripping	H2SO4, PM10	156	2389.92	71	15.32	5	0.0424	2080	0.2323
			Nitric Acid		EEH- Nickel Stripping	NOX, PM10	698	8201.5	5	11.75	5	0.0103	2080	0.0561
B-7	EU 005	SV 008 (O)	Nickel 2 - Zincate	Sodium Hydroxide, Zinc Oxide	EEH- Nickel Stripping	H2SO4, PM10	698		71		5	0.0524	2080	0.2866
B-8a			Nickel 2 - Cold Rinse		EEH Surface Treatment (Zincate Immersion)	Zinc, PM10	190	2280	5	12	0	0.0000	2080	0.0000
B-8b			Nickel 2 - Cold Rinse					0					-	2080
B-9	EU 006	SV 002 (M)	Nickel 2 - Medium Phosphorus Electroless Nickel	Nickel sulfate	Explode example cakes	Ni, PM10	645.5	6784.205	25	10.51	5	0.0424	2080	0.2321
B-10	EU 007	SV 002 (M)	Nickel Sulfate, Lactic Acid	NICKLAD 808HA	Explode example cakes	VOC	845	9210.5	3	10.9	5	0.0069	2080	0.0378
			Nickel Sulfate	Nickel Sulfate	Explode example cakes	Ni, PM10	385	4046.35	25	10.51	5	0.0253	2080	0.1385
B-11	EU 008	SV 002 (M)	Nickel 2 - High Phosphorus Electroless Nickel	NICKLAD 821H	Explode example cakes	VOC	391	4196.5	3	10.9	5	0.0031	2080	0.0172
B-12	EU 009	SV 002 (M)	Nickel 2 - Nitric Acid	Nitric Acid	EEH- Nickel Stripping	NOX, PM10	259	3043.25	71	11.75	5	0.0540	2080	0.2957
			Nickel 2 - Nitric Acid	Nitric Acid	EEH- Nickel Stripping	NOX, PM10	259	3043.25	71	11.75	5	0.0540	2080	0.2957

Note: A basis of 1 lb Nickel per gallon of solution was used to determine a NOX emissions factor. A conservative value of 3 lbs of NOX emitted to the air per gallon of HNO3 used was calculated. This emission factor was multiplied by the gallons of HNO3 used per step to determine NOX emissions from the step.

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOX	0.23	
VOC	0.0101	
GE		yes
PM10, PM2.5	0.38	
HCl		yes
Ni Compound	0.0068	yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOX	0.65	
VOC	0.0551	
GE		yes
PM10, PM2.5	2.09	
HCl		yes
Ni Compound	0.37	yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

Nickel 13

[illegible]

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NO _x	0.1890	
VOC	0.0653	
GF	0.0078	yes
PM ₁₀ , PM _{2.5}	0.8249	
HCl	0.4279	yes
Ni Compound	0.4782	yes
Cyanide Compound		yes
Chromium Compounds		yes
Trihalomethanes		yes

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NO _x	0.0923	
VOC	0.0228	
GHG	0.2245	yes
PM ₁₀ , PM _{2.5}	0.2245	
HCl	0.1563	yes
NH ₃ Compound	0.1747	yes
Chromatic Compound		yes
Chemical Compounds		yes
Pharmaceuticals		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE PM ₁₀ Tons/Yr
D-3	EU 028	SV 008 (O)	Zinc Diecast- soak cleaner	Sodium Metasilicate NaOH, Sodium Metasilicate Disodium phosphate, DOME, surfactant	EEH - Metal Cleaning (Alkaline Cleaning)	VOC, GE		41	10		5	0.0001	416	0.0028
D-4	EU 029	SV 008 (O)	Zinc Diecast Chromate - Steel soak	NUVAT	EEH - Metal Cleaning (Alkaline Cleaning)	VOC, GE		76	10		5	0.0002	416	0.0052
D-5a			Zinc Diecast Chromate - Cold Rinse									0.0000	416	0.0000
D-5b			Zinc Diecast Chromate - Cold Rinse									0.0000	416	0.0000
D-6	EU 030	SV 008 (O)	Zinc Diecast Chromate- Acid Salts	Sodium Bisulfate, Sodium Fluoride	EEH-Pickling(ZDC)	HF		56	100	1.36	5	0.0014	416	0.0383
D-11	EU 031	SV 008 (O)	Zinc Diecast Chromate - ROHS Chromate	Chromium III Chromic Acid Nitric Acid, Sulfuric Acid	EEH-Electroplating Acid (Chromium)	VOC	19	179.55	10	9.45	5	0.0004	416	0.0123
D-12	EU 032	SV 008 (O)	Zinc Diecast Chromate - Yellow Chromate	Chromic Acid Nitric Acid, Sulfuric Acid	EEH-Electroplating Acid (Chromium)	Chromic Acid PM10	13	141.05	30	10.85	5	0.0011	4160	0.0029
				IRIDITE 80	EEH-Electroplating Acid (Chromium)	HNO3, PM10	13	141.05	12	10.85	5	0.0004	4160	0.0012
				IRIDITE 80	EEH-Electroplating Acid (Chromium)	H2SO4, PM10	13	141.05	4	10.85	5	0.0001	4160	0.0004

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx		
VOC		
GE	0.0007	yes
PM, PM ₁₀ , PM _{2.5}	0.0003	yes
HCl	0.0016	yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds	0.0016	yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx		
VOC		
GE	0.0203	yes
PM, PM ₁₀ , PM _{2.5}	0.0080	yes
HCl	0.0044	yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds	0.0044	yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs. of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr
E-1	EU 035	SV 008 (O)	NaOH, Sodium Metasilicate, Disodium phosphate, DOME, surfactant	NUVAT	EEH - Metal Cleaning (Alkaline Cleaning)	VOC, GE		85	10		5	0.0002	4160	0.0006
E-2a												0.0000	4160	0.0000
E-2b												0.0000	4160	0.0000
E-4a												0.0000	4160	0.0000
E-4b												0.0000	4160	0.0000
E-5	EU 036	SV 003 (M)	Phosphate Acid, Sulfuric Acid	EP 2500	EEH - Electropolishing (Nickel)	H2SO4, PM10	871	12542.4	30	14.4	3	0.0564	4160	0.1545
E-6								0				0.0000	4160	0.0000
E-7a								0				0.0000	4160	0.0000
E-7b								0				0.0000	4160	0.0000
E-8	EU 037	SV 008 (O)	Nitric Acid	Nitric Acid	EEH- Nickel Stripping	NOx, PM10	75	881.25	71	11.75	5	0.0056	4160	0.0154
E-10								0				0.0000		#DIV/0!

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0056	
VOC	0.0002	
GE	0.0002	yes
PM ₁₀ , PM _{2.5}	0.0621	
HCl		yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0154	
VOC	0.0006	
GE	0.0006	yes
PM ₁₀ , PM _{2.5}	0.1699	
HCl		yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr
F-1	EU 038	SV 008 (O)	NaOH, Sodium Metasilicate, Disodium phosphate, DGM surfactant	NIUVAT	EEH - Metal Cleaning (Alkaline Cleaning)	VOC, GE		388	10		5	0.0010	2080	0.0053
F-2			NaOH, Sodium Metasilicate, Sodium Carbonate	ERACE	EEH - Metal Cleaning (Alkaline Cleaning)	PM10		1000	9.38		5	0.0023	2080	0.0128
F-3			Sodium Hydroxide, Sodium Metasilicate	BrCo 195	EEH - Metal Cleaning (Alkaline Cleaning)	PM10		300	6		5	0.0005	2080	0.0025
F-3	EU 039	SV 008 (O)	Sulfuric Acid	BRASS BURNISH #2	EEH - Acid Dipping (Nickel)	H2SO4, PM10		205	1.5		5	0.0001	2080	0.0004
F-4a												0.0000	2080	0.0000
F-4b												0.0000	2080	0.0000
F-5			Sodium Bisulfate, Sodium Fluoride	Metex M-629	?							0.0000	2080	0.0000
F-6			Fluoboric Acid	Fluoboric Acid	?							0.0000	2080	0.0000
F-7a												0.0000	2080	0.0000
F-7b												0.0000	2080	0.0000
F-8	EU 100	SV 008 (O)	Fluoboric Acid	Fluoboric Acid	EEH-Acid Dipping (Nickel)	HBF4,PM10	53	583	48	11	5	0.0070	2080	0.0383
F-9	EU 101	SV 008 (O)	Sodium Bisulfate,Sodium Fluoride	Metex M-629	EEH-Acid Dipping (Nickel)	HF		105	100	1.36	5	0.0026	416	0.0719
F-16	EU 102	SV 002 (M)	Copper Cyanide	Copper Cyanide	EEH- Electroplating Cyanide (Copper - nonconventional cyanide bath)	Cyanide Compound, PM10		55	100	24.16	3	0.0008	2080	0.0045
			Potassium Cyanide	Potassium Cyanide	EEH- Electroplating Cyanide (Copper - nonconventional cyanide bath)	Cyanide Compound, PM10		14	100		3	0.0002	2080	0.0011
F-10	EU 041	SV 002 (M)	Copper Cyanide	Copper Cyanide	EEH- Electroplating Cyanide (Copper - nonconventional cyanide bath)	Cyanide Compound, PM10	114	2754.24	100	24.16	3	0.0413	2080	0.2362
			Potassium Cyanide	Potassium Cyanide	EEH- Electroplating Cyanide (Copper - nonconventional cyanide bath)	Cyanide Compound, PM10		62	100		3	0.0009	2080	0.0051
F-11												0.0000	2080	0.0000
F-12a												0.0000	2080	0.0000
F-12b												0.0000	2080	0.0000
F-13	EU 042	SV 002 (M)	Nickel Sulfate	Nickel Sulfate	Explate example cakes	Ni, PM10	415	4523.5	25	10.9	5	0.0283	2080	0.1548
F-14	EU 096	SV 002 (M)	Nitric Acid	Nitral 808 HA	Explate example cakes	VOC	523	5700.7	3	10.9	5	0.0043	2080	0.0234
F-15	EU 097	SV 002 (M)	Nickel Sulfate	Nitric Acid	EEH-Nickel Stripping	NOx, PM10	93	1092.75	71	11.75	5	0.0070	2080	0.0382
F-15	EU 097	SV 002 (M)	Nickel Sulfate	Nickel Sulfate	Explate example cakes	Ni, PM10	96	1008.96	25	10.51	5	0.0063	2080	0.0345
			Ni	Nitral 821 H	Explate example cakes	VOC	129	1406.1	3	10.9	5	0.0011	2080	0.0058
F-17	EU 098	SV 008 (O)	Nitric acid,Phosphoric acid,acetic acid	Britt-dip	EEH-Nickel Stripping	NOx, PM10	140	1645		11.75	5	0.0105	4160	0.0287

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0175	
VOC	0.0063	
GE	0.0010	yes
PM ₁₀ , PM _{2.5}	0.1024	
HCl	0.0070	yes
Ni Compound	0.0356	yes
Cyanide Compound	0.0422	yes
Chromium Compounds		yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0669	
VOC	0.0345	
GE	0.0053	yes
PM ₁₀ , PM _{2.5}	0.4982	
HCl	0.0383	yes
Ni Compound	0.1951	yes
Cyanide Compound	0.2313	yes
Chromium Compounds		yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr
G-1	EU 045	SV 008 (O)	Proprietary Organic Acids	ISOPREP 160	Assume High Gassing	VOC	348	3128.52	10	8.99	5	0.0078	4160	0.0214
G-2a			Hand Chromate - Soak Cleaner									0.0000	4160	0.0000
G-2b			Hand Chromate - Cold Rinse									0.0000	4160	0.0000
G-3a			Hand Chromate - Cold Rinse									0.0000	4160	0.0000
G-3b			Hand Chromate - Cold Rinse									0.0000	4160	0.0000
G-5	EU 046	SV 002 (M)	Ferric Sulfate, Nitric Acid, Sulfuric Acid	Liqui-brite Nitric Acid	EEH-Surface Treatment- Descaling	NOx, PM10	64	678.4	30	10.6	5	0.0051	4160	0.0139
G-6	EU 047	SV 002 (M)	Nitric Acid	Ammonium Bifluoride	Assume High Gassing	NOx, PM10	784	9212	71	11.75	5	0.0588	4160	0.0140
G-7a			Etch Salts		Assume High Gassing	PM10		204	100			0.0051	4160	0.0000
G-7b												0.0000	4160	0.0000
G-8	EU 048	SV 008 (O)	Barium Nitrate, Sodium silicofluoride, Ferricyanide, Chromium trioxide	IRIDITE 14-2	EEH-Electroplating Acid-Chromium	Chromic Acid, PM10	9.1	85.085	60	9.35	5	0.0013	4160	0.0035
			Barium Nitrate, Sodium silicofluoride, Ferricyanide, Chromium trioxide	IRIDITE 14-2	EEH-Electroplating Acid-Chromium	Cyanide Compound HAP, PM10	9.1	85.085	10	9.35	5	0.0002	4160	0.0006
G-10	EU 049	SV 008 (O)	Barium Nitrate, Sodium silicofluoride, Ferricyanide, Chromium trioxide	IRIDITE 14-2	EEH-Electroplating Acid-Chromium	Chromic Acid, PM10	0.7	6.545	60	9.35	5	0.0001	4160	0.0003
			Barium Nitrate, Sodium silicofluoride, Ferricyanide, Chromium trioxide	IRIDITE 14-2	EEH-Electroplating Acid-Chromium	Cyanide Compound HAP, PM10	0.7	6.545	10	9.35	5	0.0000	4160	0.0000
G-12	EU 050	SV 008 (O)	Chromium III	Surtec 650	EEH-Electroplating Acid-Chromium		62	519.56	1	8.38	5	0.0001	4160	0.0004

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0639	
VOC	0.0078	
GE		yes
PM ₁₀ , PM _{2.5}	0.0706	
HCl		yes
Ni Compound		yes
Cyanide Compound	0.0002	yes
Chromium Compounds	0.0015	yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.1749	
VOC	0.0214	
GE		yes
PM ₁₀ , PM _{2.5}	0.1932	
HCl		yes
Ni Compound		yes
Cyanide Compound	0.0006	yes
Chromium Compounds	0.0041	yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

Added description 7/7/2005

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr
I-0	EU 103	SV 008 (O)	Potassium Permanganate	Potassium Permanganate	EEH-Surface Treatment-Descaling	NOX		122	10	2.7	5	0.00342	4160	0.00935
I-1a	EU 052	SV 008 (O)	NiOH, Sodium Metasilicate, Disodium phosphate, DGME, surfactant	NUTVAT	EEH - Metal cleaning- Alkaline Cleaning	VOC, GE		673	10		5	0.0017	4160	0.00461
I-1b	EU 053	SV 008 (O)	NiOH, Sodium Metasilicate, Disodium phosphate, DGME, surfactant	NUTVAT	EEH - Metal cleaning- Alkaline Cleaning	VOC, GE		2187	10		5	0.0055	4160	0.01497
I-2a		SV 008 (O)										0.0000	4160	0.00000
I-2b		SV 008 (O)										0.0000	4160	0.00000
I-3	EU 054	SV 008 (O)	HCl	HCl	EEH - Pickling - Iron and Steel	HCl	880	8500.8	35	9.66	3	0.0446	4160	0.12217
I-4a		SV 008 (O)						0	0			0.0000	4160	0.00000
I-4b		SV 008 (O)	Butyl Carbitol, Naphenic Oil, Sodium Sulfonate			Butyl Carbitol VOC, GE		0				0.0000	4160	0.00000
I-8	EU 055	SV 008 (O)		LAB OIL 100	Assume High Gassing	VOC, GE	159	1232.25	10	7.75	5	0.0031	4160	0.00843
I-12	EU 056	SV 008 (O)	Kerosene, Barium Compound, Ethylene Glycol Monobutyl Ether	METAL GUARD 180	Assume High Gassing	EGME VOC GE	180	1242	3	6.9	5	0.0009	4160	0.00255
		SV 008 (O)	Kerosene, Barium Compound, Ethylene Glycol Monobutyl Ether	METAL GUARD 180	Assume High Gassing	Kerosene, VOC	180	1242	88	6.9	5	0.0273	4160	0.07480
I-13	EU 057	SV 008 (O)	VOC	Stoddard	Assume High Gassing	VOC		55	100		5	0.0014	4160	0.00376

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0034	
VOC	0.0399	
GE	0.0112	yes
PM, PM ₁₀ , PM _{2.5}		
HCl	0.0446	yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0094	
VOC	0.1091	
GE	0.0306	yes
PM, PM ₁₀ , PM _{2.5}		
HCl	0.1222	yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr	PTE HCl Tons/Yr	PTE CN Compounds Tons/Yr	PTE Ni Compounds Tons/Yr
K-2	EU 070	SV/008 (O)	Barium Nitrate, Sodium sulfite/sulfate, Potassium nitrate, Chromium trioxide	IRIDITE 14-2	EEH-Electroplating Acid Chromium	Chromic Acid, PM10		6	60		5	0.0001	4680	0.0002			
		SV/008 (O)		IRIDITE 14-2	EEH-Electroplating Acid Chromium	Cyanide Compound HAP, PM10		6	10		5	0.0000	4680	0.0000			
K-3	EU 071	SV/008 (O)	Barium Nitrate, Sodium sulfite/sulfate, Potassium nitrate, Chromium trioxide	IRIDITE 14-2	EEH-Electroplating Acid Chromium	Chromic Acid, PM10		503	60		5	0.0075	4680	0.0184			
K-12a		SV/008 (O)		IRIDITE 14-2	EEH-Electroplating Acid Chromium	Cyanide Compound HAP, PM10		503	10		5	0.0013	4680	0.0031			
K-12b		SV/008 (O)										0.0000	4680	0.0000			
K-5	EU 104	SV/008 (O)	Chromium III		EEH-Electroplating Acid Chromium							0.0000	4680				
K-10a	EU 072	SV/008 (O)	Ferrous Sulfate, Urea, Ammonium Borfluoride, Nitric Acid	Sures 650	EEH-Electroplating Acid Chromium		819	6863.22	1	8.38	5	0.0017	4680	0.0042			
K-10b	EU 114	SV/008 (O)	Ferrous Sulfate, Urea, Ammonium Borfluoride, Nitric Acid	Lumi-brite	EEH-Surface Treatment-Decaling	Ferrous PM10	1180	12508	30	10.6	5	0.0958	4680	0.2265			
K-12	EU 073	SV/008 (O)	Hydrofluoric Acid, Nickel Fluoride, Nickel Fluorides	Saeblean 203	EEH-Surface Treatment-Decaling	Ferrous HNO3, PM10	420	4607.4	20	10.97	5	0.0230	4680	0.0561			
K-13	EU 074	SV/008 (O)	ANODAL CS-21 LIQUID, SANODAL DEEP BLACK, SANODAL DEEP BLACK	ANODAL CS-21 LIQUID, SANODAL DEEP BLACK, SANODAL DEEP BLACK	EEH-Electroplating Acid Chromium	Nickel PM10 HAP Chromic Acid, PM10	312	3385.2	13	10.85	2	0.0044	4680				
K-15	EU 075	SV/008 (O)	Chromium, Chromium(III) Compound, Hexylene Glycol	IBHL Liquid	EEH-Electroplating Acid Chromium	VOC	77	847	56	11	5	0.0119	4680	0.0289			
K-20	EU 076	SV/008 (O)	Nitric Acid	Nitric Acid	EEH-Stripping-Nickel	NOx, PM10	697	7132.25	3	11	5	0.0006	4680	0.0015			
		SV/008 (O)	Sulfuric Acid	Sulfuric Acid	Assume High Gassing	H2SO4, PM10	2175	33321	100	15.32	5	0.8330	4680	2.0270			
		SV/008 (O)	carboxylic acid,phosphoric acid	Alpha APS 777-B	Assume High Gassing	VOC	109	899.25	10	8.25	5	0.0022	4680	0.0055			
		SV/008 (O)	polycarboxylic	Alpha APS: PWP	Assume High Gassing	VOC		675	100		5	0.0169	4680	0.0411			
K-18	EU 105	SV/008 (O)	Sulfuric Acid	Sulfuric Acid	Assume High Gassing	H2SO4, PM10	695	10647.4	100	15.32	5	0.2662	4680	0.6477			
		SV/008 (O)	Glyoxime Hydrox	Anodal EF Liquid	Assume High Gassing	VOC	118	1222.48	40	10.36	5	0.0122	4680	0.0297			
		SV/008 (O)	Acetic Acid	Anodal EF Liquid	Assume High Gassing	VOC	118	1222.48	38	10.36	5	0.0116	4680	0.0283			

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (sectno)
NOx	0.0455	
VOC	0.0456	
GE		yes
PM4, PM2.5, PM10, HCl	2.1198	yes
Ni Compound	0.0044	yes
Cyanide Compound	0.0013	yes
Chromium Compounds	0.0195	yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (sectno)
NOx	0.1108	
VOC	0.1061	
GE		yes
PM4, PM2.5, PM10, HCl	3.1311	yes
Ni Compound	0.0107	yes
Cyanide Compound	0.0021	yes
Chromium Compounds	0.0474	yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. The amount of HCl gas used for HCl gas formation per gallon of HNO3 used was calculated to determine NOx emissions.

TANK NO.	EU ID	STACK VENT ID	Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Make Up (gallons)	Make Up (pounds)	Conc. Of Pollutant Component from MSDS (%)	Density (lb/gal)	% Loss Of Makeup	Actual Uncontrolled Emissions tons	Actual Hours of Operation (hours)	PTE Tons/Yr
L-5	EU 077	SV007(M), SV008(O)	Ferrous Sulfate, Urea, Ammonium Bifluoride, Nitric Acid	Liquid-brite	EEH-Surface Treatment- Descaling	Ferrous PM10	149	1579.4	30	10.6	5	0.0118	4680	0.0288
L-10	EU 079	SV 008(O)	Anodize Line- Cold Water Rinse		EEH-Surface Treatment- Descaling	NOx, PM10	149	1579.4	30	10.6	5	0.0118	4680	0.0288
L-11	EU 080	SV 008(O)	Anodize Line- Cold Water Rinse		EEH-Surface Treatment- Descaling	Nickel PM10								
L-13	EU 081	SV 008(O)	Anodize Line- Anodize Bath		EEH-Electroplating Acid- Nickel	HAP	312	3385.2	13	10.85	2	0.0044	4680	0.0107
L-14		SV 008(O)	Anodize Line- Cold Water Rinse											
L-8a			Anodize Line- Cold Water Rinse											
L-8b			Anodize Line- Cold Water Rinse											
L-9	EU 079	SV 008(O)	Anodize Line- Black Dye	SANODAL DEEP BLACK HBL LIQ	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10	96	1056	27	11	5	0.0071	4680	0.0173
L-10	EU 080	SV 008(O)	Anodize Line- Nitrlic	Nitric Acid	EEH- Stripping- Nickel	NOx, PM10	766		71	11.75	5	0.0055	4680	0.0000
L-13	EU 081	SV 008(O)	Anodize Line- Anodize Bath	Sulfuric Acid	Assume High Gassing	H2SO4, PM10	635	9728.2	100	15.32	5	0.2432	4680	0.5918
L-14		SV 008(O)	Anodize Line- Cold Water Rinse	Alpha APS 777-B	Assume High Gassing	VOC	187	1542.75	10	8.25	5	0.0039	4680	0.0094
												0.0000	4680	0.0000
				Alpha APS: PWP	Assume High Gassing	VOC		749	100		5	0.0187	4680	0.0456
L-14	EU 106	SV 008(O)	Anodize line-Hardcoat II	Sulfuric Acid	Assume High Gassing	H2SO4, PM10	675	10341	100	15.32	5	0.2385	4680	0.6291
				Alpha APS 777-B	Assume High Gassing	VOC	304	2908	10	8.25	5	0.0063	4680	0.0153
				Alpha APS: PWP	Assume High Gassing	VOC		660	100		5	0.0165	4680	0.0402
L-16	EU 082	SV 008(O)	Anodize Line- Red Dye	Aluminum Flery Red ML Pbr	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10	100	100	94		5	0.0024	4680	0.0057
				Aluminum Flery Red ML Pbr	EEH-Electroplating Acid- Chromium	VOC	100	100	4		5	0.0001	4680	0.0002
L-20	EU 083	SV 008(O)	Anodize Line- Outside Gold Dye	ORMINAL N LIQUID	EEH-Electroplating Acid- Iron	Iron PM10	76	731.88	27	9.63	3	0.0030	4680	0.0072
L-17	EU 084	SV 008(O)	Anodize Line- Blue Dye	ORMINAL N LIQUID	EEH-Electroplating Acid- Iron	VOC	76	731.88	5	9.63	3	0.0005	4680	0.0013
L-18	EU 085	SV 008(O)	Anodize Line- Green Dye	Aluminum Blue A Pbr	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10		65	100		5	0.0016	4680	0.0040
				Green Dye	EEH-Electroplating Acid- Chromium	PM10	16	16	94		5	0.0004	4680	0.0009
				Green Dye	EEH-Electroplating Acid- Chromium	VOC		16	4		5	0.0000	4680	0.0000
				Yellow Dye	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10	6	6	94		5	0.0001	4680	0.0003
				Yellow Dye	EEH-Electroplating Acid- Chromium	VOC	6	6	4		5	0.0000	4680	0.0000
L-25	EU 086	SV 008(O)	Anodize Line- Small Cleaner(graco 1)	ALPREP 230	Assume High Gassing	VOC	70	625.6	9	8.98	5	0.0014	4680	0.0034
L-26	EU 107	SV 008(O)	Anodize Line- Small Cleaner(graco 2)	AL PREP 230	Assume High Gassing	VOC	70	625.6	9	8.98	5	0.0014	4680	0.0054
L-28	EU 108	SV 008(O)	Anodize chromic strip	chromic acid flake	EEH-stripping, Acid- chromium	NOx, PM10, Chromic Acid, PM10	21	21	100	2.7	5	0.0005	4680	0.0013
L-21	EU 109	SV 008(O)	Anodize Line - Purple Dye	ALUMINUM VIOLET CLW POWDER	EEH-Electroplating Acid- Copper	Copper PM10		21	100	2.7	5	0.0005	4680	0.0013
L-22	EU 110	SV 008(O)	Anodize Line- Olive Drab Dye	ALUMINUM OLIVE DRAB No.9 p	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10		36	75		2	0.0003	4680	0.0007
L-23a	EU 111	SV 008(O)	Anodize Line- Bronze Dye	ALUMINUM OLIVE BROWN 2R POWDER	Assume High Gassing	Nickel PM10	28	28	69		5	0.0005	4680	0.0012
				ALUMINUM OLIVE BROWN 2R POWDER	Assume High Gassing	HAP	0	0				0.0000	4680	0.0000
				Nickel Compound, Hexylene Glycol	EEH-Electroplating Acid- Chromium	VOC	0	0				0.0000	4680	0.0000
EU 112	SV 008(O)		Anodize line -blue 4A	Aluminum Blue 4A Pbr	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10	6	6	100		5	0.0002	4680	0.0004
L-23b	EU 113	SV 008(O)	Anodize Line-Inside Gold Dye	Aluminium Orange 3A p	EEH-Electroplating Acid- Chromium	Chromic Acid, PM10	6	6	77		5	0.0001	4680	0.0003

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.0698	
VOC	0.0459	
GE		yes
PM ₁₀ , PM _{2.5}	0.6158	
HCl		yes
Ni Compound	0.0044	
Cyanide Compound		yes
Chromium Compounds	0.0039	yes
Trichloroethylene		yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx	0.1699	
VOC	0.1189	
GE		yes
PM ₁₀ , PM _{2.5}	1.4984	
HCl		yes
Ni Compound	0.0107	
Cyanide Compound		yes
Chromium Compounds	0.0314	yes
Trichloroethylene		yes

A basis of 1 lb Nickel per gallon of solution was used for NOx emissions calculations. A conservative value of 3 lbs of NOx formation per gallon of HNO3 used was calculated to determine NOx emissions.

Table 3: Degreaser

TCE Actual Emissions Calculations

TANK NO.		Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Amount Purchased (lbs/year)	Actual Emissions (tons/year)
M-1	Degreaser-trichloroethylene	Trichloroethylene	Trichloroethylene	Assume 100% Loss	VOC, HAP	7920	3.96
M-2	Degreaser-still	Trichloroethylene	Trichloroethylene	Assume 100% Loss	VOC, HAP	7920	3.96

TCE Limited Emissions Calculations

TANK NO.		Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Conc. Of Pollutant Component from MSDS (%)	Bath Surface Area (m ²)	Emission Factor (150 kg/m ² /month)	Limited Emissions Tons/Yr
M-1	Degreaser-trichloroethylene	Trichloroethylene	Trichloroethylene	Halogenated Solvent Clening Machine NESHAP	VOC, HAP	100	2.32	150	4.60
M-2	Degreaser-still	Trichloroethylene	Trichloroethylene	Halogenated Solvent Clening Machine NESHAP	VOC, HAP	100	0.557	150	1.11

TCE PTE Calculations

TANK NO.		Primary Components	MSDS Name	Source and Process Type	Pollutant Type	Conc. Of Pollutant Component from MSDS (%)	Bath Surface Area (m ²)	Emission Factor (kg/m ² /hr)	Hours of Operation (hr)	PTE Tons/Yr
M-1	Degreaser-trichloroethylene	Trichloroethylene	Trichloroethylene	EPA- 40CFR63.465e(1)	VOC, HAP	100	2.32	1.95	8760	43.69
M-2	Degreaser-still	Trichloroethylene	Trichloroethylene	EPA- 40CFR63.465e(1)	VOC, HAP	100	0.557	1.95	8760	10.49

Actual Emissions Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx		
VOC	7.92	
GE		yes
PM, PM ₁₀ , PM _{2.5}		
HCl		yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene	7.92	yes

PTE Summary

Pollutant	Emissions (tons)	HAP (yes/no)
NOx		
VOC	54.17	
GE		yes
PM, PM ₁₀ , PM _{2.5}		
HCl		yes
Ni Compound		yes
Cyanide Compound		yes
Chromium Compounds		yes
Trichloroethylene	54.17	yes

AVTEC FINISHING, INC.
Emissions Calculations

AQ Facility ID No: 05300319

Paint Booth Calculations (EU115)

PM Coating Used	Everlube 626 Diluted	Highest PM Paint
VOC Coating Used	Everlube 626 Diluted	Highest VOC Paint
% VOC in Paint	90 % VOC/Gal. of Paint	MSDS
% HAP in Paint		
Max. Rate of Gun	0.03125 Gallons/hour	Manufacturer Specs
Potential Operation	8760 Hrs/Yrs	Calculated Potentials
Density of Paint(VOC)	7.3 Lbs/Gal	MSDS
Density of Paint(PM)	7.3 Lbs/Gal	MSDS
Transfer Efficiency	85 % Efficient	Manufacturer Specs
Solids by Volume	10 % Solids	MSDS
Filter Efficiency	92 % Efficient	Manufacturer Specs
Capture Efficiency	80 Efficient	
Solvent Used	Methyl Ethyl Ketone	Highest VOC Solvent
% VOC of Solvent	100 VOC/Gal	MSDS
Density of Solvent	7.455 Lbs/Gal	MSDS

SPRAY POTENTIAL TO EMIT VOC

$E6 * E7 * E8 / 2000 * E5 / 100 =$ 0.899269 Tons of VOC's/Yr

RY 2009 UNCONTROLLED ACTUAL VOC EMISSIONS

8	Gallons of Everlube 626 Diluted	90 % Voc	0.02628 Tons of VOC's
60	Gallons of Methyl Ethyl Ketone	100 % Voc	0.22365 Tons of VOC's
			<u>0.24993 Total</u>

UNCONTROLLED SPRAY POTENTIAL TO EMIT FOR PARTICULATES

$E6 * E7 * E9 / 2000 * E11 / 100 * (1 - PCT(E10)) * (1 - PCT(E13)) =$ 0.0029976 Tons of Particulates

CONTROLLED SPRAY POTENTIAL TO EMIT FOR PARTICULATES

$E6 * 60 * E7 * E9 / 2000 * E11 / 100 * E13 / 100 * (1 - PCT(E10)) * (1 - PCT(E12)) =$ 0.000239805 Tons of Pa

RY 2009 UNCONTROLLED ACTUAL SPRAY PARTICULATE EMISSIONS

8 Gal * $E9 / 2000 * E11 / 100 * (1 - PCT(E10)) * (1 - PCT(E13)) =$ 0.0000876 Tons of Pa

RY 2009 CONTROLLED ACTUAL SPRAY PARTICULATE EMISSIONS

8 Gal * $E9 / 2000 * E11 / 100 * (1 - PCT(E10)) * E13 / 100 * (1 - PCT(E12)) =$ 0.000028032 Tons of Pa

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AVTEC FINISHING, INC.
HAP Emission Calculations

AQ Facility ID No: 05300319

Paint Booth HAP Emissions

Maximum Rate of Gun 0.03125 gal/hour
 Potential Operation 8760 hours/year
 Density of Paint 7.3 lb/gallon

HAP Name	Maximum HAP material	Maximum HAP percent	Maximum annual emissions
Toluene	Everlube 626 Dilute	40	0.39968 tons
MEK	Everlube 626 Dilute	10	0.09992 tons
Phenol	Everlube 626 Dilute	5	0.04996 tons

<i>Total Potential HAPs</i>	0.54955 tons
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RY 2009 Actual Material Usage

Product	Amount Used (lbs)	%Toluene	%MEK	%Phenol
Everlube 626 Diluted	58.400	40	10	5
Cleaning Solvent	447.300	0	100	0

RY 2009 Actual HAP emissions from Paint Booth

	Toluene	MEK	Phenol
<i>HAP Emissions in lbs.</i>	23.36000	453.14000	2.92000
<i>HAP Emissions in tons</i>	0.01168	0.22657	0.00146

Highest Single HAP emission 0.22657 tons
Total HAP emissions 0.23971 tons

Attatchment 2:
Facility Description



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
1 EU 001	Active	PER 001		<input type="checkbox"/>	M-1	SV 001 (M)		Degreaser	Finishing Equipment	XLE-3-W-A-SP	3471				
2 EU 002	Active	PER 001		<input checked="" type="checkbox"/>	B-3	SV 002 (M)		Nickel 2 Acid Etch	Avtec	NA	3471	200		Ft2	Hr
3 EU 002	Removed	PER 002		<input type="checkbox"/>	B-3			Nickel 2 Acid Etch	Avtec	NA	3471	200		Ft2	Hr
4 EU 003	Active	PER 001		<input checked="" type="checkbox"/>	B-4	SV 002 (M)		Nickel 2 Deoxidizer	Avtec	NA	3471	200		Ft2	Hr
5 EU 003	Removed	PER 002		<input type="checkbox"/>	B-4			Nickel 2 Deoxidizer	Avtec	NA	3471	200		Ft2	Hr
6 EU 004	Active	PER 001		<input checked="" type="checkbox"/>	B-6	SV 008 (O)		Nickel 2 50% Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
7 EU 004	Removed	PER 002		<input type="checkbox"/>	B-6			Nickel 2 50% Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
8 EU 005	Active	PER 001		<input checked="" type="checkbox"/>	B-7	SV 008 (O)		Nickel 2 Zincate	Avtec	NA	3471	200		Ft2	Hr
9 EU 005	Removed	PER 002		<input type="checkbox"/>	B-7			Nickel 2 Zincate	Avtec	NA	3471	200		Ft2	Hr
10 EU 006	Active	PER 001		<input type="checkbox"/>	B-9	SV 002 (M)		Nickel 2 Medium Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr
11 EU 006	Removed	PER 002		<input type="checkbox"/>	B-9			Nickel 2 Medium Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr
12 EU 007	Active	PER 001		<input type="checkbox"/>	B-10	SV 002 (M)		Nickel 2 High Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr
13 EU 007	Removed	PER 002		<input type="checkbox"/>	B-10			Nickel 2 High Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr
14 EU 008	Active	PER 001		<input checked="" type="checkbox"/>	B-11	SV 002 (M)		Nickel 2 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
15 EU 008	Removed	PER 002		<input type="checkbox"/>	B-11			Nickel 2 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
16 EU 009	Active	PER 001		<input checked="" type="checkbox"/>	B-12	SV 002 (M)		Nickel 2 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
17 EU 009	Removed	PER 002		<input type="checkbox"/>	B-12			Nickel 2 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
18 EU 010	Active	PER 001		<input checked="" type="checkbox"/>	A-1	SV 008 (O)		Nickel 1 Soak Cleaner	Avtec	NA	3471	200		Ft2	Hr
19 EU 010	Removed	PER 002		<input type="checkbox"/>	A-1			Nickel 1 Soak Cleaner	Avtec	NA	3471	200		Ft2	Hr
20 EU 011	Active	PER 001		<input checked="" type="checkbox"/>	A-4	SV 008 (O)		Nickel 1 Hydrochloric Acid	Avtec	NA	3471	200		Ft2	Hr
21 EU 011	Removed	PER 002		<input type="checkbox"/>	A-4			Nickel 1 Hydrochloric Acid	Avtec	NA	3471	200		Ft2	Hr
22 EU 012	Active	PER 001		<input type="checkbox"/>	A-6	SV 002 (M)		Nickel 1 Medium Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr
23 EU 013	Active	PER 001		<input type="checkbox"/>	A-7	SV 002 (M)		Nickel 1 High Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr
24 EU 013	Removed	PER 002		<input type="checkbox"/>	A-7			Nickel 1 High Phosphorus Electroless Nickel	Avtec	NA	3471	200		Ft2	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
1	EU 001	Active	PER 001	06/09/2001	08/09/2001				
2	EU 002	Active	PER 001	01/01/1997	01/01/1997				
3	EU 002	Removed	PER 002	01/01/1997	01/01/1997				
4	EU 003	Active	PER 001	01/01/1997	01/01/1997				
5	EU 003	Removed	PER 002	01/01/1997	01/01/1997				
6	EU 004	Active	PER 001	01/01/1997	01/01/1997				
7	EU 004	Removed	PER 002	01/01/1997	01/01/1997				
8	EU 005	Active	PER 001	01/01/1997	01/01/1997				
9	EU 005	Removed	PER 002	01/01/1997	01/01/1997				
10	EU 006	Active	PER 001	01/01/1997	01/01/1997				
11	EU 006	Removed	PER 002	01/01/1997	01/01/1997				
12	EU 007	Active	PER 001	01/01/1997	01/01/1997				
13	EU 007	Removed	PER 002	01/01/1997	01/01/1997				
14	EU 008	Active	PER 001	01/01/1997	01/01/1997				
15	EU 008	Removed	PER 002	01/01/1997	01/01/1997				
16	EU 009	Active	PER 001	01/01/1997	01/01/1997				
17	EU 009	Removed	PER 002	01/01/1997	01/01/1997				
18	EU 010	Active	PER 001	01/01/2002	01/01/2002				
19	EU 010	Removed	PER 002	01/01/2002	01/01/2002				
20	EU 011	Active	PER 001	01/01/2002	01/01/2002				
21	EU 011	Removed	PER 002	01/01/2002	01/01/2002				
22	EU 012	Active	PER 001	01/01/2002	01/01/2002				
23	EU 013	Active	PER 001	01/01/2002	01/01/2002				
24	EU 013	Removed	PER 002	01/01/2002	01/01/2002				



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
25 EU 014	Active	PER 001		<input checked="" type="checkbox"/>	A-8	SV 002 (M)		Nickel 1 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
26 EU 014	Removed	PER 002		<input type="checkbox"/>	A-8			Nickel 1 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
27 EU 015	Active	PER 001		<input checked="" type="checkbox"/>	A-9	SV 002 (M)		Nickel 1 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
28 EU 015	Removed	PER 002		<input type="checkbox"/>	A-9			Nickel 1 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
29 EU 016	Active	PER 001		<input type="checkbox"/>	A-12	SV 002 (M)		Nickel 1 Teflon Nickel Plate	Avtec	NA	3471	200		Ft2	Hr
30 EU 017	Active	PER 001		<input checked="" type="checkbox"/>	A-13	SV 002 (M)		Nickel 1 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
31 EU 017	Removed	PER 002		<input type="checkbox"/>	A-13			Nickel 1 Nitric Acid	Avtec	NA	3471	200		Ft2	Hr
32 EU 018	Active	PER 001		<input checked="" type="checkbox"/>	A-14	SV 002 (M)		Nickel 2 Wood's Nickel Strike	Avtec	NA	3471	200		Ft2	Hr
33 EU 018	Removed	PER 002		<input type="checkbox"/>	A-14			Nickel 2 Wood's Nickel Strike	Avtec	NA	3471	200		Ft2	Hr
34 EU 019	Active	PER 001		<input checked="" type="checkbox"/>	C-1	SV 008 (O)		Nickel 3 Soak Cleaner	Avtec	NA	3471	300		Ft2	Hr
35 EU 019	Removed	PER 002		<input type="checkbox"/>	C-1			Nickel 3 Soak Cleaner	Avtec	NA	3471	300		Ft2	Hr
36 EU 020	Active	PER 001		<input checked="" type="checkbox"/>	C-4	SV 008 (O)		Nickel 3 Hydrochloric Acid	Avtec	NA	3471	300		Ft2	Hr
37 EU 020	Removed	PER 002		<input type="checkbox"/>	C-4			Nickel 3 Hydrochloric Acid	Avtec	NA	3471	300		Ft2	Hr
38 EU 021	Active	PER 001		<input checked="" type="checkbox"/>	C-6	SV 008 (O)		Nickel 3 Hydrochloric Acid	Avtec	NA	3471	300		Ft2	Hr
39 EU 021	Removed	PER 002		<input type="checkbox"/>	C-6			Nickel 3 Hydrochloric Acid	Avtec	NA	3471	300		Ft2	Hr
40 EU 022	Active	PER 001		<input type="checkbox"/>	C-7	SV 003 (M)		Nickel 3 Medium Phosphorus Electroless Nickel	Avtec	NA	3471	300		Ft2	Hr
41 EU 023	Active	PER 001		<input checked="" type="checkbox"/>	C-8	SV 003 (M)		Nickel 3 Nitric Acid Strip	Avtec	NA	3471	300		Ft2	Hr
42 EU 023	Removed	PER 002		<input type="checkbox"/>	C-8			Nickel 3 Nitric Acid Strip	Avtec	NA	3471	300		Ft2	Hr
43 EU 024	Active	PER 001		<input checked="" type="checkbox"/>	C-9	SV 003 (M)		Nickel 3 Nitric Acid Strip	Avtec	NA	3471	300		Ft2	Hr
44 EU 024	Removed	PER 002		<input type="checkbox"/>	C-9			Nickel 3 Nitric Acid Strip	Avtec	NA	3471	300		Ft2	Hr
45 EU 025	Active	PER 001		<input checked="" type="checkbox"/>	C-12	SV 008 (O)		Nickel 3 Chromate	Avtec	NA	3471	300		Ft2	Hr
46 EU 025	Removed	PER 002		<input type="checkbox"/>	C-12			Nickel 3 Chromate	Avtec	NA	3471	300		Ft2	Hr
47 EU 026	Active	PER 001		<input checked="" type="checkbox"/>	C-15	SV 003 (M)		Nickel 3 Nickel Stripper	Avtec	NA	3471	300		Ft2	Hr
48 EU 026	Removed	PER 002		<input type="checkbox"/>	C-15			Nickel 3 Nickel Stripper	Avtec	NA	3471	300		Ft2	Hr
49 EU 027	Active	PER 001		<input checked="" type="checkbox"/>	C-16	SV 003 (M)		Nickel 3 Nickel Stripper	Avtec	NA	3471	300		Ft2	Hr
50 EU 027	Removed	PER 002		<input type="checkbox"/>	C-16			Nickel 3 Nickel Stripper	Avtec	NA	3471	300		Ft2	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
25	EU 014	Active	PER 001	01/01/2002	01/01/2002					
26	EU 014	Removed	PER 002	01/01/2002	01/01/2002					
27	EU 015	Active	PER 001	01/01/2002	01/01/2002					
28	EU 015	Removed	PER 002	01/01/2002	01/01/2002					
29	EU 016	Active	PER 001	01/01/2002	01/01/2002					
30	EU 017	Active	PER 001	01/01/2002	01/01/2002					
31	EU 017	Removed	PER 002	01/01/2002	01/01/2002					
32	EU 018	Active	PER 001	01/01/2002	01/01/2002					
33	EU 018	Removed	PER 002	01/01/2002	01/01/2002					
34	EU 019	Active	PER 001	01/01/1989	01/01/1989					
35	EU 019	Removed	PER 002	01/01/1989	01/01/1989					
36	EU 020	Active	PER 001	01/01/1989	01/01/1989					
37	EU 020	Removed	PER 002	01/01/1989	01/01/1989					
38	EU 021	Active	PER 001	01/01/1989	01/01/1989					
39	EU 021	Removed	PER 002	01/01/1989	01/01/1989					
40	EU 022	Active	PER 001	01/01/1989	01/01/1989					
41	EU 023	Active	PER 001	01/01/1989	01/01/1989					
42	EU 023	Removed	PER 002	01/01/1989	01/01/1989					
43	EU 024	Active	PER 001	01/01/1989	01/01/1989					
44	EU 024	Removed	PER 002	01/01/1989	01/01/1989					
45	EU 025	Active	PER 001	01/01/1989	01/01/1989					
46	EU 025	Removed	PER 002	01/01/1989	01/01/1989					
47	EU 026	Active	PER 001	01/01/1989	01/01/1989					
48	EU 026	Removed	PER 002	01/01/1989	01/01/1989					
49	EU 027	Active	PER 001	01/01/1989	01/01/1989					
50	EU 027	Removed	PER 002	01/01/1989	01/01/1989					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
51 EU 028	Active	PER 001		<input checked="" type="checkbox"/>	D-2	SV 008 (O)		Zinc Diecast Chromate Alkaline Zinc	Avtec	NA	3471	100		Ft2	Hr
52 EU 028	Removed	PER 002		<input type="checkbox"/>	D-2			Zinc Diecast Chromate Alkaline Zinc	Avtec	NA	3471	100		Ft2	Hr
53 EU 029	Active	PER 001		<input checked="" type="checkbox"/>	D-4	SV 008 (O)		Zinc Diecast Chromate Steel Soak	Avtec	NA	3471	100		Ft2	Hr
54 EU 029	Removed	PER 002		<input type="checkbox"/>	D-4			Zinc Diecast Chromate Steel Soak	Avtec	NA	3471	100		Ft2	Hr
55 EU 030	Active	PER 001		<input checked="" type="checkbox"/>	D-7	SV 008 (O)		Zinc Diecast Chromate HCl	Avtec	NA	3471	100		Ft2	Hr
56 EU 030	Removed	PER 002		<input type="checkbox"/>	D-7			Zinc Diecast Chromate HCl	Avtec	NA	3471	100		Ft2	Hr
57 EU 031	Active	PER 001		<input checked="" type="checkbox"/>	D-9	SV 008 (O)		Zinc Diecast Chromate Clear Chromate	Avtec	NA	3471	100		Ft2	Hr
58 EU 031	Removed	PER 002		<input type="checkbox"/>	D-9			Zinc Diecast Chromate Clear Chromate	Avtec	NA	3471	100		Ft2	Hr
59 EU 032	Active	PER 001		<input checked="" type="checkbox"/>	D-10	SV 008 (O)		Zinc Diecast Chromate Black Chromate	Avtec	NA	3471	100		Ft2	Hr
60 EU 032	Active	PER 002		<input type="checkbox"/>	D-10			Zinc Diecast Chromate Black Chromate	Avtec	NA	3471	100		Ft2	Hr
61 EU 033	Active	PER 001		<input checked="" type="checkbox"/>	D-11	SV 008 (O)		Zinc Diecast Chromate DC-1	Avtec	NA	3471	100		Ft2	Hr
62 EU 033	Removed	PER 002		<input type="checkbox"/>	D-11			Zinc Diecast Chromate DC-1	Avtec	NA	3471	100		Ft2	Hr
63 EU 034	Active	PER 001		<input checked="" type="checkbox"/>	D-12	SV 008 (O)		Zinc Diecast Chromate Yellow Chromate	Avtec	NA	3471	100		Ft2	Hr
64 EU 034	Removed	PER 002		<input type="checkbox"/>	D-12			Zinc Diecast Chromate Yellow Chromate	Avtec	NA	3471	100		Ft2	Hr
65 EU 035	Active	PER 001		<input checked="" type="checkbox"/>	E-1	SV 008 (O)		Electropolish Soak Cleaner	Avtec	NA	3471	30		Ft2	Hr
66 EU 035	Removed	PER 002		<input type="checkbox"/>	E-1			Electropolish Soak Cleaner	Avtec	NA	3471	30		Ft2	Hr
67 EU 036	Active	PER 001		<input checked="" type="checkbox"/>	E-5	SV 003 (M)		Electropolish	Avtec	NA	3471	30		Ft2	Hr
68 EU 036	Removed	PER 002		<input type="checkbox"/>	E-5			Electropolish	Avtec	NA	3471	30		Ft2	Hr
69 EU 037	Active	PER 001		<input checked="" type="checkbox"/>	E-8	SV 008 (O)		Electropolish Nitric Acid	Avtec	NA	3471	30		Ft2	Hr
70 EU 037	Removed	PER 002		<input type="checkbox"/>	E-8			Electropolish Nitric Acid	Avtec	NA	3471	30		Ft2	Hr
71 EU 038	Active	PER 001		<input checked="" type="checkbox"/>	F-1	SV 008 (O)		Nickel 4 Steel Soak Cleaner	Avtec	NA	3471	125		Ft2	Hr
72 EU 038	Removed	PER 002		<input type="checkbox"/>	F-1			Nickel 4 Steel Soak Cleaner	Avtec	NA	3471	125		Ft2	Hr
73 EU 039	Active	PER 001		<input checked="" type="checkbox"/>	F-3	SV 008 (O)		Nickel 4 Brass Soak Cleaner	Avtec	NA	3471	125		Ft2	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
51	EU 028	Active	PER 001	01/01/1996	01/01/1996					
52	EU 028	Removed	PER 002	01/01/1996	01/01/1996					
53	EU 029	Active	PER 001	01/01/1996	01/01/1996					
54	EU 029	Removed	PER 002	01/01/1996	01/01/1996					
55	EU 030	Active	PER 001	01/01/1996	01/01/1996					
56	EU 030	Removed	PER 002	01/01/1996	01/01/1996					
57	EU 031	Active	PER 001	01/01/1996	01/01/1996					
58	EU 031	Removed	PER 002	01/01/1996	01/01/1996					
59	EU 032	Active	PER 001	01/01/1996	01/01/1996					
60	EU 032	Active	PER 002	01/01/1996	01/01/1996					
61	EU 033	Active	PER 001	01/01/1996	01/01/1996					
62	EU 033	Removed	PER 002	01/01/1996	01/01/1996					
63	EU 034	Active	PER 001	01/01/1996	01/01/1996					
64	EU 034	Removed	PER 002	01/01/1996	01/01/1996					
65	EU 035	Active	PER 001	01/01/2002	01/01/2002					
66	EU 035	Removed	PER 002	01/01/2002	01/01/2002					
67	EU 036	Active	PER 001	01/01/2002	01/01/2002					
68	EU 036	Removed	PER 002	01/01/2002	01/01/2002					
69	EU 037	Active	PER 001	01/01/2002	01/01/2002					
70	EU 037	Removed	PER 002	01/01/2002	01/01/2002					
71	EU 038	Active	PER 001	01/01/1996	01/01/1996					
72	EU 038	Removed	PER 002	01/01/1996	01/01/1996					
73	EU 039	Active	PER 001	01/01/1996	01/01/1996					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
74 EU 039	Removed	PER 002		<input type="checkbox"/>	F-3			Nickel 4 Brass Soak Cleaner	Avtec	NA	3471	125		Ft2	Hr
75 EU 040	Active	PER 001		<input checked="" type="checkbox"/>	F-8	SV 008 (O)		Nickel 4 Zinc Bright Dip	Avtec	NA	3471	125		Ft2	Hr
76 EU 040	Removed	PER 002		<input type="checkbox"/>	F-8			Nickel 4 Zinc Bright Dip	Avtec	NA	3471	125		Ft2	Hr
77 EU 041	Active	PER 001		<input checked="" type="checkbox"/>	F-10	SV 002 (M)		Nickel 4 Copper Plate	Avtec	NA	3471	125		Ft2	Hr
78 EU 041	Removed	PER 002		<input type="checkbox"/>	F-10			Nickel 4 Copper Plate	Avtec	NA	3471	125		Ft2	Hr
79 EU 042	Active	PER 001		<input type="checkbox"/>	F-13	SV 002 (M)		Nickel 4 Medium Phosphorus Electroless Nickel	Avtec	NA	3471	125		Ft2	Hr
80 EU 042	Removed	PER 002		<input type="checkbox"/>	F-13			Nickel 4 Medium Phosphorus Electroless Nickel	Avtec	NA	3471	125		Ft2	Hr
81 EU 043	Active	PER 001		<input checked="" type="checkbox"/>	F-14	SV 002 (M)		Nickel 4 Nitric Acid	Avtec	NA	3471	125		Ft2	Hr
82 EU 043	Removed	PER 002		<input type="checkbox"/>	F-14			Nickel 4 Nitric Acid	Avtec	NA	3471	125		Ft2	Hr
83 EU 044	Active	PER 001		<input type="checkbox"/>	F-15	SV 002 (M)		Nickel 4 Teflon Nickel Plate	Avtec	NA	3471	125		Ft2	Hr
84 EU 044	Removed	PER 002		<input type="checkbox"/>	F-15			Nickel 4 Teflon Nickel Plate	Avtec	NA	3471	125		Ft2	Hr
85 EU 045	Active	PER 001		<input checked="" type="checkbox"/>	G-1	SV 008 (O)		Hand Chromate Soak Cleaner	Avtec	NA	3471	200		Ft2	Hr
86 EU 045	Removed	PER 002		<input type="checkbox"/>	G-1			Hand Chromate Soak Cleaner	Avtec	NA	3471	200		Ft2	Hr
87 EU 046	Active	PER 001		<input checked="" type="checkbox"/>	G-5	SV 002 (M)		Hand Chromate Desmutter	Avtec	NA	3471	200		Ft2	Hr
88 EU 046	Removed	PER 002		<input type="checkbox"/>	G-5			Hand Chromate Desmutter	Avtec	NA	3471	200		Ft2	Hr
89 EU 047	Active	PER 001		<input checked="" type="checkbox"/>	G-6	SV 002 (M)		Hand Chromate Deoxidizer	Avtec	NA	3471	200		Ft2	Hr
90 EU 047	Removed	PER 002		<input type="checkbox"/>	G-6			Hand Chromate Deoxidizer	Avtec	NA	3471	200		Ft2	Hr
91 EU 048	Active	PER 001		<input checked="" type="checkbox"/>	G-8	SV 008 (O)		Hand Chromate Yellow Chromate	Avtec	NA	3471	200		Ft2	Hr
92 EU 048	Active	PER 002		<input type="checkbox"/>	G-8	SV 008 (O)		Hand Chromate Yellow Chromate	Avtec	NA	3471	200		Ft2	Hr
93 EU 049	Active	PER 001		<input checked="" type="checkbox"/>	G-10	SV 008 (O)		Hand Chromate Clear Chromate	Avtec	NA	3471	200		Ft2	Hr
94 EU 049	Removed	PER 002		<input type="checkbox"/>	G-10			Hand Chromate Clear Chromate	Avtec	NA	3471	200		Ft2	Hr
95 EU 050	Active	PER 001		<input checked="" type="checkbox"/>	G-12	SV 008 (O)		Hand Chromate Yellow Chromate	Avtec	NA	3471	200		Ft2	Hr
96 EU 050	Removed	PER 002		<input type="checkbox"/>	G-12			Hand Chromate Yellow Chromate	Avtec	NA	3471	200		Ft2	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
74	EU 039	Removed	PER 002	01/01/1996	01/01/1996					
75	EU 040	Active	PER 001	01/01/1996	01/01/1996					
76	EU 040	Removed	PER 002	01/01/1996	01/01/1996					
77	EU 041	Active	PER 001	01/01/1996	01/01/1996					
78	EU 041	Removed	PER 002	01/01/1996	01/01/1996					
79	EU 042	Active	PER 001	01/01/1996	01/01/1996					
80	EU 042	Removed	PER 002	01/01/1996	01/01/1996					
81	EU 043	Active	PER 001	01/01/1996	01/01/1996					
82	EU 043	Removed	PER 002	01/01/1996	01/01/1996					
83	EU 044	Active	PER 001	01/01/1996	01/01/1996					
84	EU 044	Removed	PER 002	01/01/1996	01/01/1996					
85	EU 045	Active	PER 001	01/01/1995	01/01/1995					
86	EU 045	Removed	PER 002	01/01/1995	01/01/1995					
87	EU 046	Active	PER 001	01/01/1995	01/01/1995					
88	EU 046	Removed	PER 002	01/01/1995	01/01/1995					
89	EU 047	Active	PER 001	01/01/1995	01/01/1995					
90	EU 047	Removed	PER 002	01/01/1995	01/01/1995					
91	EU 048	Active	PER 001	01/01/1995	01/01/1995					
92	EU 048	Active	PER 002	01/01/1995	01/01/1995					
93	EU 049	Active	PER 001	01/01/1995	01/01/1995					
94	EU 049	Removed	PER 002	01/01/1995	01/01/1995					
95	EU 050	Active	PER 001	01/01/1995	01/01/1995					
96	EU 050	Removed	PER 002	01/01/1995	01/01/1995					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignificant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
97 EU 051	Active	PER 001		<input checked="" type="checkbox"/>	G-13	SV 008 (O)		Hand Chromate Deoxidizer	Avtec	NA	3471	200		Ft2	Hr
98 EU 051	Removed	PER 002		<input type="checkbox"/>	G-13			Hand Chromate Deoxidizer	Avtec	NA	3471	200		Ft2	Hr
99 EU 052	Active	PER 001		<input checked="" type="checkbox"/>	I-1a	SV 008 (O)		Black Oxide Line Soak Cleaner	Avtec	NA	3471	300		Lb	Hr
100 EU 052	Removed	PER 002		<input type="checkbox"/>	I-1a			Black Oxide Line Soak Cleaner	Avtec	NA	3471	300		Lb	Hr
101 EU 053	Active	PER 001		<input checked="" type="checkbox"/>	I-1b	SV 008 (O)		Black Oxide Line Soak Cleaner	Avtec	NA	3471	300		Lb	Hr
102 EU 053	Removed	PER 002		<input type="checkbox"/>	I-1b			Black Oxide Line Soak Cleaner	Avtec	NA	3471	300		Lb	Hr
103 EU 054	Active	PER 001		<input checked="" type="checkbox"/>	I-3	SV 008 (O)		Black Oxide Line Hydrochloric Acid	Avtec	NA	3471	300		Lb	Hr
104 EU 054	Removed	PER 002		<input type="checkbox"/>	I-3			Black Oxide Line Hydrochloric Acid	Avtec	NA	3471	300		Lb	Hr
105 EU 055	Active	PER 001		<input checked="" type="checkbox"/>	I-8	SV 008 (O)		Black Oxide Line Oil	Avtec	NA	3471	300		Lb	Hr
106 EU 055	Removed	PER 002		<input type="checkbox"/>	I-8			Black Oxide Line Oil	Avtec	NA	3471	300		Lb	Hr
107 EU 056	Active	PER 001		<input checked="" type="checkbox"/>	I-12	SV 008 (O)		Black Oxide Line Dry Oil Drip Station	Avtec	NA	3471	300		Lb	Hr
108 EU 056	Removed	PER 002		<input type="checkbox"/>	I-12			Black Oxide Line Dry Oil Drip Station	Avtec	NA	3471	300		Lb	Hr
109 EU 057	Active	PER 001		<input checked="" type="checkbox"/>	I-13	SV 008 (O)		Black Oxide Line Dry Oil	Avtec	NA	3471	300		Lb	Hr
110 EU 057	Removed	PER 002		<input type="checkbox"/>	I-13			Black Oxide Line Dry Oil	Avtec	NA	3471	300		Lb	Hr
111 EU 058	Active	PER 001		<input checked="" type="checkbox"/>	I-15	SV 008 (O)		Black Oxide Line Chromic Acid	Avtec	NA	3471	300		Lb	Hr
112 EU 058	Removed	PER 002		<input type="checkbox"/>	I-15			Black Oxide Line Chromic Acid	Avtec	NA	3471	300		Lb	Hr
113 EU 059	Active	PER 001		<input checked="" type="checkbox"/>	J-3	SV 008 (O)		Barrel Zinc Line Electocleaner	Avtec	NA	3471	400		Lb	Hr
114 EU 059	Removed	PER 002		<input type="checkbox"/>	J-3			Barrel Zinc Line Electocleaner	Avtec	NA	3471	400		Lb	Hr
115 EU 060	Active	PER 001		<input checked="" type="checkbox"/>	J-6	SV 008 (O)		Barrel Zinc Line Hydrochloric Acid Pickle	Avtec	NA	3471	400		Lb	Hr
116 EU 060	Removed	PER 002		<input type="checkbox"/>	J-6			Barrel Zinc Line Hydrochloric Acid Pickle	Avtec	NA	3471	400		Lb	Hr
117 EU 061	Active	PER 001		<input checked="" type="checkbox"/>	J-9	SV 008 (O)		Barrel Zinc Line Zinc Generator	Avtec	NA	3471	400		Lb	Hr
118 EU 061	Removed	PER 002		<input type="checkbox"/>	J-9			Barrel Zinc Line Zinc Generator	Avtec	NA	3471	400		Lb	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
97	EU 051	Active	PER 001	01/01/1995	01/01/1995					
98	EU 051	Removed	PER 002	01/01/1995	01/01/1995					
99	EU 052	Active	PER 001	01/01/2000	01/01/2000					
100	EU 052	Removed	PER 002	01/01/2000	01/01/2000					
101	EU 053	Active	PER 001	01/01/2000	01/01/2000					
102	EU 053	Removed	PER 002	01/01/2000	01/01/2000					
103	EU 054	Active	PER 001	01/01/2000	01/01/2000					
104	EU 054	Removed	PER 002	01/01/2000	01/01/2000					
105	EU 055	Active	PER 001	01/01/2000	01/01/2000					
106	EU 055	Removed	PER 002	01/01/2000	01/01/2000					
107	EU 056	Active	PER 001	01/01/2000	01/01/2000					
108	EU 056	Removed	PER 002	01/01/2000	01/01/2000					
109	EU 057	Active	PER 001	01/01/2000	01/01/2000					
110	EU 057	Removed	PER 002	01/01/2000	01/01/2000					
111	EU 058	Active	PER 001	01/01/2000	01/01/2000					
112	EU 058	Removed	PER 002	01/01/2000	01/01/2000					
113	EU 059	Active	PER 001	01/01/1994	01/01/1994					
114	EU 059	Removed	PER 002	01/01/1994	01/01/1994					
115	EU 060	Active	PER 001	01/01/1994	01/01/1994					
116	EU 060	Removed	PER 002	01/01/1994	01/01/1994					
117	EU 061	Active	PER 001	01/01/1994	01/01/1994					
118	EU 061	Removed	PER 002	01/01/1994	01/01/1994					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
119 EU 062	Active	PER 001		<input checked="" type="checkbox"/>	J-10	SV 004 (M) SV 008 (O)		Barrel Zinc Line Zinc Plate	Avtec	NA	3471	400		Lb	Hr
120 EU 062	Removed	PER 002		<input type="checkbox"/>	J-10	SV 008 (O)		Barrel Zinc Line Zinc Plate	Avtec	NA	3471	400		Lb	Hr
121 EU 063	Active	PER 001		<input checked="" type="checkbox"/>	J-13	SV 008 (O)		Barrel Zinc Line Clear Chromate	Avtec	NA	3471	400		Lb	Hr
122 EU 063	Removed	PER 002		<input type="checkbox"/>	J-13			Barrel Zinc Line Clear Chromate	Avtec	NA	3471	400		Lb	Hr
123 EU 064	Active	PER 001		<input checked="" type="checkbox"/>	J-14	SV 008 (O)		Barrel Zinc Line Yellow Chromate	Avtec	NA	3471	400		Lb	Hr
124 EU 064	Removed	PER 002		<input type="checkbox"/>	J-14			Barrel Zinc Line Yellow Chromate	Avtec	NA	3471	400		Lb	Hr
125 EU 065	Active	PER 001		<input checked="" type="checkbox"/>	J-16	SV 008 (O)		Barrel Zinc Line Black Chromate	Avtec	NA	3471	400		Lb	Hr
126 EU 065	Removed	PER 002		<input type="checkbox"/>	J-16			Barrel Zinc Line Black Chromate	Avtec	NA	3471	400		Lb	Hr
127 EU 066	Active	PER 001		<input checked="" type="checkbox"/>	K-1	SV 008 (O)		Hardcoat/Chromate Line Purple Dye	Avtec	NA	3471	400		Ft2	Hr
128 EU 066	Removed	PER 002		<input type="checkbox"/>	K-1			Hardcoat/Chromate Line Purple Dye	Avtec	NA	3471	400		Ft2	Hr
129 EU 067	Active	PER 001		<input type="checkbox"/>	K-2	SV 008 (O)		Hardcoat/Chromate Line Olive Drab Dye	Avtec	NA	3471	400		Ft2	Hr
130 EU 067	Removed	PER 002		<input type="checkbox"/>	K-2			Hardcoat/Chromate Line Olive Drab Dye	Avtec	NA	3471	400		Ft2	Hr
131 EU 068	Active	PER 001		<input checked="" type="checkbox"/>	K-3	SV 008 (O)		Hardcoat/Chromate Line Bronze Dye	Avtec	NA	3471	400		Ft2	Hr
132 EU 068	Removed	PER 002		<input type="checkbox"/>	K-3			Hardcoat/Chromate Line Bronze Dye	Avtec	NA	3471	400		Ft2	Hr
133 EU 069	Active	PER 001		<input type="checkbox"/>	K-4	SV 008 (O)		Hardcoat/Chromate Line Inside Gold Dye	Avtec	NA	3471	400		Ft2	Hr
134 EU 069	Removed	PER 002		<input type="checkbox"/>	K-4			Hardcoat/Chromate Line Inside Gold Dye	Avtec	NA	3471	400		Ft2	Hr
135 EU 070	Active	PER 001		<input checked="" type="checkbox"/>	K-7	SV 008 (O)		Hardcoat/Chromate Line Chromate	Avtec	NA	3471	400		Ft2	Hr
136 EU 070	Removed	PER 002		<input type="checkbox"/>	K-7			Hardcoat/Chromate Line Chromate	Avtec	NA	3471	400		Ft2	Hr
137 EU 071	Active	PER 001		<input type="checkbox"/>	K-8	SV 008 (O)		Hardcoat/Chromate Line Chromate	Avtec	NA	3471	400		Ft2	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
119	EU 062	Active	PER 001	01/01/1994	01/01/1994					
120	EU 062	Removed	PER 002	01/01/1994	01/01/1994					
121	EU 063	Active	PER 001	01/01/1994	01/01/1994					
122	EU 063	Removed	PER 002	01/01/1994	01/01/1994					
123	EU 064	Active	PER 001	01/01/1994	01/01/1994					
124	EU 064	Removed	PER 002	01/01/1994	01/01/1994					
125	EU 065	Active	PER 001	01/01/1994	01/01/1994					
126	EU 065	Removed	PER 002	01/01/1994	01/01/1994					
127	EU 066	Active	PER 001	01/01/1988	01/01/1988					
128	EU 066	Removed	PER 002	01/01/1988	01/01/1988					
129	EU 067	Active	PER 001	01/01/1988	01/01/1988					
130	EU 067	Removed	PER 002	01/01/1988	01/01/1988					
131	EU 068	Active	PER 001	01/01/1988	01/01/1988					
132	EU 068	Removed	PER 002	01/01/1988	01/01/1988					
133	EU 069	Active	PER 001	01/01/1988	01/01/1988					
134	EU 069	Removed	PER 002	01/01/1988	01/01/1988					
135	EU 070	Active	PER 001	01/01/1988	01/01/1988					
136	EU 070	Removed	PER 002	01/01/1988	01/01/1988					
137	EU 071	Active	PER 001	01/01/1988	01/01/1988					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n Units d	
138 EU 071	Active	PER 002		<input type="checkbox"/>	K-8			Hardcoat/Chromate Line Chromate	Avtec	NA	3471	400		Ft2 Hr	
139 EU 072	Active	PER 001		<input checked="" type="checkbox"/>	K-13	SV 006 (M) SV 008 (O)		Hardcoat/Chromate Line Deoxidizer	Avtec	NA	3471	400		Ft2 Hr	
140 EU 072	Removed	PER 002		<input type="checkbox"/>	K-13	SV 008 (O)		Hardcoat/Chromate Line Deoxidizer	Avtec	NA	3471	400		Ft2 Hr	
141 EU 073	Active	PER 001		<input checked="" type="checkbox"/>	K-15	SV 008 (O)		Hardcoat/Chromate Line Nickel Seal	Avtec	NA	3471	400		Ft2 Hr	
142 EU 073	Removed	PER 002		<input type="checkbox"/>	K-15			Hardcoat/Chromate Line Nickel Seal	Avtec	NA	3471	400		Ft2 Hr	
143 EU 074	Active	PER 001		<input type="checkbox"/>	K-16	SV 008 (O)		Hardcoat/Chromate Line Black Dye	Avtec	NA	3471	400		Ft2 Hr	
144 EU 075	Active	PER 001		<input checked="" type="checkbox"/>	K-18	SV 008 (O)		Hardcoat/Chromate Line Nitric	Avtec	NA	3471	400		Ft2 Hr	
145 EU 075	Removed	PER 002		<input type="checkbox"/>	K-18			Hardcoat/Chromate Line Nitric	Avtec	NA	3471	400		Ft2 Hr	
146 EU 076	Active	PER 001		<input checked="" type="checkbox"/>	K-20	SV 005 (M)		Hardcoat/Chromate Line Hardcoat Bath	Avtec	NA	3471	400		Ft2 Hr	
147 EU 076	Removed	PER 002		<input type="checkbox"/>	K-20			Hardcoat/Chromate Line Hardcoat Bath	Avtec	NA	3471	400		Ft2 Hr	
148 EU 077	Active	PER 001		<input checked="" type="checkbox"/>	L-5	SV 007 (M) SV 008 (O)		Anodize Line Deoxidizer	Avtec	NA	3471	400		Ft2 Hr	
149 EU 077	Removed	PER 002		<input type="checkbox"/>	L-5	SV 008 (O)		Anodize Line Deoxidizer	Avtec	NA	3471	400		Ft2 Hr	
150 EU 078	Active	PER 001		<input checked="" type="checkbox"/>	L-7	SV 007 (M) SV 008 (O)		Anodize line Nickel Seal	Avtec	NA	3471	400		Ft2 Hr	
151 EU 078	Removed	PER 002		<input type="checkbox"/>	L-7	SV 008 (O)		Anodize line Nickel Seal	Avtec	NA	3471	400		Ft2 Hr	
152 EU 079	Active	PER 001		<input type="checkbox"/>	L-9	SV 008 (O)		Anodize Line Black Dye	Avtec	NA	3471	400		Ft2 Hr	
153 EU 080	Active	PER 001		<input checked="" type="checkbox"/>	L-11	SV 008 (O)		Anodize Line Nitric	Avtec	NA	3471	400		Ft2 Hr	
154 EU 080	Removed	PER 002		<input type="checkbox"/>	L-11			Anodize Line Nitric	Avtec	NA	3471	400		Ft2 Hr	
155 EU 081	Active	PER 001		<input checked="" type="checkbox"/>	L-13	SV 008 (O)		Anodize Line Anodize Bath	Avtec	NA	3471	400		Ft2 Hr	
156 EU 081	Removed	PER 002		<input type="checkbox"/>	L-13			Anodize Line Anodize Bath	Avtec	NA	3471	400		Ft2 Hr	
157 EU 082	Active	PER 001		<input type="checkbox"/>	L-15	SV 008 (O)		Anodize Line Red Dye	Avtec	NA	3471	400		Ft2 Hr	
158 EU 083	Active	PER 001		<input checked="" type="checkbox"/>	L-16	SV 008 (O)		Anodize Line Outside Gold Dye	Avtec	NA	3471	400		Ft2 Hr	
159 EU 083	Removed	PER 002		<input type="checkbox"/>	L-16			Anodize Line Outside Gold Dye	Avtec	NA	3471	400		Ft2 Hr	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
138	EU 071	Active	PER 002	01/01/1988	01/01/1988					
139	EU 072	Active	PER 001	01/01/1988	01/01/1988					
140	EU 072	Removed	PER 002	01/01/1988	01/01/1988					
141	EU 073	Active	PER 001	01/01/1988	01/01/1988					
142	EU 073	Removed	PER 002	01/01/1988	01/01/1988					
143	EU 074	Active	PER 001	01/01/1988	01/01/1988					
144	EU 075	Active	PER 001	01/01/1988	01/01/1988					
145	EU 075	Removed	PER 002	01/01/1988	01/01/1988					
146	EU 076	Active	PER 001	01/01/1988	01/01/1988					
147	EU 076	Removed	PER 002	01/01/1988	01/01/1988					
148	EU 077	Active	PER 001	01/01/1991	01/01/1991					
149	EU 077	Removed	PER 002	01/01/1991	01/01/1991					
150	EU 078	Active	PER 001	01/01/1991	01/01/1991					
151	EU 078	Removed	PER 002	01/01/1991	01/01/1991					
152	EU 079	Active	PER 001	01/01/1991	01/01/1991					
153	EU 080	Active	PER 001	01/01/1991	01/01/1991					
154	EU 080	Removed	PER 002	01/01/1991	01/01/1991					
155	EU 081	Active	PER 001	01/01/1991	01/01/1991					
156	EU 081	Removed	PER 002	01/01/1991	01/01/1991					
157	EU 082	Active	PER 001	01/01/1991	01/01/1991					
158	EU 083	Active	PER 001	01/01/1991	01/01/1991					
159	EU 083	Removed	PER 002	01/01/1991	01/01/1991					



FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
													Materials	Units n	Units d
160 EU 084	Active	PER 001		<input type="checkbox"/>	L-17	SV 008 (O)		Anodize Line Blue Dye	Avtec	NA	3471	400		Ft2	Hr
161 EU 085	Active	PER 001		<input type="checkbox"/>	L-18	SV 008 (O)		Anodize Line Green Dye	Avtec	NA	3471	400		Ft2	Hr
162 EU 085	Removed	PER 002		<input type="checkbox"/>	L-18			Anodize Line Green Dye	Avtec	NA	3471	400		Ft2	Hr
163 EU 086	Active	PER 001		<input checked="" type="checkbox"/>	L-19	SV 008 (M)		Anodize Line Small Cleaner	Avtec	NA	3471	400		Ft2	Hr
164 EU 086	Removed	PER 002		<input type="checkbox"/>	L-19			Anodize Line Small Cleaner	Avtec	NA	3471	400		Ft2	Hr
165 EU 087	Active	EIS 004		<input type="checkbox"/>	O-9	SV 008 (O)		Nickel 13 Medium Phosphorous Electroless Nickle			3471				
166 EU 087	Removed	PER 002		<input type="checkbox"/>	O-9			Nickel 13 Medium Phosphorous Electroless Nickle			3471				
167 EU 088	Active	EIS 004		<input type="checkbox"/>	O-10	SV 008 (O)		Nickel 13 High Phosphorous Electroless Nickle			3471				
168 EU 088	Removed	PER 002		<input type="checkbox"/>	O-10			Nickel 13 High Phosphorous Electroless Nickle			3471				
169 EU 089	Active	EIS 004		<input type="checkbox"/>	O-11	SV 008 (O)		Nickel 13 Medium Phosphorous Electroless Nickle			3471				
170 EU 089	Removed	PER 002		<input type="checkbox"/>	O-11			Nickel 13 Medium Phosphorous Electroless Nickle			3471				
171 EU 090	Active	PER 002		<input type="checkbox"/>		SV 002 (M)	CE 001	A-19, Nickel 1 - Black Nickel			3471	5	Product	Batch	Hr
172 EU 091	Active	PER 002		<input type="checkbox"/>		SV 008		Anodize chromic strip			3471	5	Product	Batch	Hr
173 EU 092	Active	PER 002		<input type="checkbox"/>		SV 008		Anodize Line- Olive Drab Dye			3471	5	Product	Batch	Hr
174 EU 093	Active	PER 002		<input type="checkbox"/>		SV 002		Passivate Dichromate/ Nitric			3471	5	Product	Batch	Hr

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Commence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/Space Heat	Bottleneck	Elevator Type
160	EU 084	Active	PER 001	01/01/1991	01/01/1991					
161	EU 085	Active	PER 001	01/01/1991	01/01/1991					
162	EU 085	Removed	PER 002	01/01/1991	01/01/1991					
163	EU 086	Active	PER 001	01/01/1991	01/01/1991					
164	EU 086	Removed	PER 002	01/01/1991	01/01/1991					
165	EU 087	Active	EIS 004							
166	EU 087	Removed	PER 002							
167	EU 088	Active	EIS 004							
168	EU 088	Removed	PER 002							
169	EU 089	Active	EIS 004							
170	EU 089	Removed	PER 002							
171	EU 090	Active	PER 002							
172	EU 091	Active	PER 002							
173	EU 092	Active	PER 002							
174	EU 093	Active	PER 002							

FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records

Action: PER 002

AQD Facility ID: 05300319

Facility Name: Avtec Finishing Systems Inc

ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
							Diameter or Length (feet)	Width (feet)				
1	SV 001	Active	PER 001	001	Degreaser Roof Vent	22	24		0	70	Estimate	Up, No Cap
2	SV 002	Active	PER 001	002	Main Scrubber - Plating	34	38		23590	70	Estimate	Up, No Cap
3	SV 003	Active	PER 001	003	East Scrubber - Plating	34	38		18500	70	Estimate	Up, No Cap
4	SV 004	Active	PER 001	004	South Plating Vent	25	24		10000	70	Estimate	Up, With Cap
5	SV 005	Active	PER 001	005	Scrubber - Anodize Area	34	38		25000	70	Estimate	Up, No Cap
6	SV 006	Active	PER 001	006	Anodize Vent (North)	25	24		10000	70	Estimate	Horizontal
7	SV 007	Active	PER 001	007	Hardcoat Vent (South)	25	24		10000	70	Estimate	Horizontal
8	SV 008	Active	PER 001	008	Building Exhaust							
9	SV 009	Active	PER 002	009	Paint Booth Stack Vent	22	2.5		4200	72	Estimate	Up, No Cap

Attatchment 3:

CD-01 Forms



COMPLIANCE PLAN **CD-01**

Facility Name: Avtec Finishing Systems Inc

Permit Number: 05300319 - 002

Subject Item: Total Facility

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	OPERATIONAL REQUIREMENTS
2.0		CD	Minn. R. 7007.0800, subp. 2	Permit Appendix: This permit contains an appendix as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendix.
3.0		CD	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080	The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.
4.0		CD	Minn. R. 7011.0020	Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.
5.0		CD	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.
6.0		CD	Minn. R. 7007.0800, subps. 14 and 16(J)	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.
7.0		CD	Minn. R. 7019.1000, subp. 4	Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.
8.0		CD	Minn. R. 7011.0150	Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.
9.0		CD	Minn. R. 7030.0010 - 7030.0080	Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.
10.0		CD	Minn. R. 7007.0800, subp. 9(A)	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).
11.0		CD	Minn. R. 7007.0800, subp. 16	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.
12.0		CD	hdr	PERFORMANCE TESTING
13.0		CD	Minn. R. ch. 7017	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.
14.0		CD	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2	<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.</p>



COMPLIANCE PLAN **CD-01**

Facility Name: Avtec Finishing Systems Inc

Permit Number: 05300319 - 002

15.0		CD	Minn. R. 7017.2025, subp. 3	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.
16.0		CD	hdr	MONITORING REQUIREMENTS
17.0		CD	Minn. R. 7007.0800, subp. 4(D)	Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).
18.0		CD	Minn. R. 7007.0800, subp. 4(D)	Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.
19.0		CD	hdr	RECORDKEEPING
20.0		CD	Minn. R. 7007.0800, subp. 5(C)	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).
21.0		CD	Minn. R. 7007.0800, subp. 5(B)	Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.
22.0		CD	Minn. R. 7007.1200, subp. 4	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.
23.0		CD	hdr	REPORTING/SUBMITTALS
24.0		CD	Minn. R. 7019.1000, subp. 3	Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.
25.0		CD	Minn. R. 7019.1000, subp. 2	Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.
26.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.



COMPLIANCE PLAN **CD-01**

Facility Name: Avtec Finishing Systems Inc

Permit Number: 05300319 - 002

27.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.
28.0		S/A	Minn. R. 7007.0800, subp. 6(A)(2)	Semiannual Deviations Report: due 30 days after end of each calendar half-year starting 12/05/2005. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.
29.0		CD	Minn. R. 7007.1150 - 7007.1500	Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.
30.0		S/A	Minn. R. 7007.0400, subp. 2	Application for Permit Reissuance: due 180 days before expiration of Existing Permit
31.0		CD	Minn. R. 7007.1400, subp. 1(H)	Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).
32.0		S/A	Minn. R. 7007.0800, subp. 6(C)	Compliance Certification: due 30 days after end of each calendar year starting 12/05/2005 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.
33.0		CD	Minn. R. 7002.0005 - 7002.0095	Emission Fees: due 60 days after receipt of an MPCA bill.
34.0		CD	Minn. R. 7019.3000 - 7019.3100	Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.



COMPLIANCE PLAN **CD-01**

Facility Name: Avtec Finishing Systems Inc

Permit Number: 05300319 - 002

Subject Item: GP 012 Treatment Tanks

Associated Items:

- EU 012 Nickel 1 Medium Phosphorus Electroless Nickel
- EU 016 Nickel 1 Teflon Nickel Plate
- EU 022 Nickel 3 Medium Phosphorus Electroless Nickel
- EU 032 Zinc Diecast Chromate Black Chromate
- EU 048 Hand Chromate Yellow Chromate
- EU 071 Hardcoat/Chromate Line Chromate
- EU 074 Hardcoat/Chromate Line Black Dye
- EU 079 Anodize Line Black Dye
- EU 082 Anodize Line Red Dye
- EU 084 Anodize Line Blue Dye
- EU 090 A-19, Nickel 1 - Black Nickel
- EU 091 Anodize chromic strip
- EU 092 Anodize Line- Olive Drab Dye
- EU 093 Passivate Dichromate/ Nitric

	NC/ CA	Type	Citation	Requirement
1.0		LIMIT	Minn. R. 7011.0715, subp. 1.A.	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
2.0		LIMIT	Minn. R. 7011,0715, subp. 1.B.	Opacity: less than or equal to 20 percent opacity



COMPLIANCE PLAN **CD-01**

Facility Name: Avtec Finishing Systems Inc

Permit Number: 05300319 - 002

Subject Item: EU 001 Degreaser

Associated Items: SV 001 Degreaser Roof Vent

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS/CONTROL REQUIREMENTS
2.0		CD	40 CFR Section 63.463(a)(1); Minn. R. 7011.7200	Each cleaning machine shall be designed or operated to meet the control equipment or technique requirement of (1) or (2) below: (1) An idling and downtime mode cover, as described in 40 CFR Section 63.463(d)(1)(i), that may be readily opened or closed, that completely covers the cleaning machine openings when in place, and is free of cracks, holes, or other defects. (2) A reduce droom draft as described in 40 CFR Section 63.463(e)(2)(ii).
3.0		CD	40 CFR Section 63.463(a)(2); Minn. R. 7011.7200	The degreaser shall have a freeboard ratio of 0.75 or greater.
4.0		CD	40 CFR Section 63.463(a)(3); Minn. R. 7011.7200	The degreaser must have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute (11 feet per minute) or less from the initial loading of parts through removal of cleaned parts.
5.0		CD	40 CFR Section 63.463(a)(4); Minn. R. 7011.7200	The degreaser must be equipped with a device that shuts of the sump heat if the sump liquid solvent level drops to the sump heater coil (does not apply to a vapor cleaning machine that uses steam to heat the solvent).
6.0		CD	40 CFR Section 63.463(a)(5); Minn. R. 7011.7200	The degreaser must be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
7.0		CD	40 CFR Section 63.463(a)(6); Minn. R. 7011.7200	The degreaser shall have a primary condenser.
8.0		CD	40 CFR Section 63.463(b)(2)(i); Minn. R. 7011.7200	Use the following control combination (Option 4): freeboard ratio of 1.0. reduced room draft, and superheated vapor.
9.0		CD	hdr	WORK PRACTICE STANDARDS
10.0		CD	40 CFR Section 63.463(d)(1); Minn. R. 7011.7200	Control air distrubances across the degreaser by incorporating the control requirement or techniques in item (i) or (ii): (i) Cover(s) shall be in place during the idling mode, and during the downtime mode unless either the solvent has been removed from the machine or maintenance or monitoring is being performed that requires the cover(s) to not be in place. (ii) A reduced room draft as described in 40 CFR Section 63.463(e)(2)(ii).
11.0		CD	40 CFR Section 63.463(d)(2); Minn. R. 7011.7200	The parts baskets or the parts being cleaned in an open-top batch vapor cleaning machine shall not occupy more than 50 percent of the solvent/air interface area unless the parts baskets or parts are introduced at a speed of 0.9 meters per minute (3 feet per minute) or less.
12.0		CD	40 CFR Section 63.463(d)(3); Minn. R. 7011.7200	Any spraying operations shall be done within the vapor zone or within a section of the solvent cleaning machine that is not directly exposed to the ambient air (i.e., a baffled or enclosed area of the solvent cleaning machine).
13.0		CD	40 CFR Section 63.463(d)(4); Minn. R. 7011.7200	Parts Orientation: Parts shall be oriented so that the solvent drains from them freely. Parts having cavities or blind holes shall be tipped or rotated before being removed from any solvent cleaning machine unless an equal effective approach has been approved by the Administrator.
14.0		CD	40 CFR Section 63.463(d)(5); Minn. R. 7011.7200	Parts baskets or parts shall not be removed from any solvent cleaning machine until dripping has stopped.
15.0		CD	40 CFR Section 63.463(d)(6); Minn. R. 7011.7200	During startup of each vapor cleaning machine, the primary condenser shall be turned on before the sump heater.
16.0		CD	40 CFR Section 63.463(d)(7); Minn. R. 7011.7200	During shutdown of each vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.
17.0		CD	40 CFR Section 63.463(d)(8); Minn. R. 7011.7200	When solvent is added or drained from any solvent cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.



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18.0		CD	40 CFR Section 63.463(d)(9); Minn. R. 7011.7200	Each solvent cleaning machine and associated controls shall be maintained as recommended by the manufacturers of the equipment or using alternative maintenance practices that have been demonstrated to the Administrator's satisfaction to achieve the same or better results as those recommended by the manufacturer.
19.0		CD	40 CFR Section 63.463(d)(10); Minn. R. 7011.7200	Appendix A: Each operator of a solvent cleaning machine shall complete and pass the applicable sections of the test of solvent cleaning procedures in 40 CFR section 63, subp. T, appendix A, if requested during an inspection by the Administrator.
20.0		CD	40 CFR Section 63.463(d)(11); Minn. R. 7011.7200	Waste solvent, still bottoms, and sump bottoms shall be collected and stored in closed containers. The closed containers may contain a device that would allow pressure relief, but would not allow liquid solvent to drain from the container.
21.0		CD	40 CFR Section 63.463(d)(12); Minn. R. 7011.7200	Sponges, fabric, wood, and paper products shall not be cleaned in the degreaser.
22.0		CD	hdr	OPERATING REQUIREMENTS
23.0		CD	40 CFR Section 63.463(e)(1); Minn. R. 7011.7200	Conduct monitoring of each control device used to comply with 40 CFR Section 63.463 of this subpart as provided in 40 CFR Section 63.466.
24.0		CD	40 CFR Section 63.463(e)(2)(ii)(A); 40 CFR Section 63.463(e)(3)(ii); Minn. R. 7011.7200	Ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine does not exceed 50 feet per minute at any time as measured using the procedures in 40 CFR Section 63.466(d) An exceedance has occurred if this requirement is not met and is not corrected within 15 days of detection. Adjustments or repairs shall be made to reestablish required temperature. The temperature shall be remeasured immediately upon adjustment or repair and demonstrated to meet the requirement.
25.0		CD	40 CFR Section 63.463(e)(2)(ii)(B); 40 CFR Section 63.463(e)(3)(i); Minn. R. 7011.7200	The Permittee shall establish and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute (50 feet per minute) or less as described in 40 CFR Section 63.466(d). An exceedance has occurred if the above requirement has not been met.
26.0		CD	40 CFR Section 63.463(e)(2)(vi)(A); 40 CFR Section 63.463(e)(3)(ii); Minn. R. 7011.7200	The Permittee shall ensure that the temperature of the solvent vapor at the center of the superheated vapor zone is at least 10 degrees F above the solvent's boiling point. An exceedance has occurred if the above requirement has not been met and is not corrected within 15 days of detection. Adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be re-measured immediately upon adjustment or repair and demonstrated to be within required limits.
27.0		CD	40 CFR Section 63.463(e)(2)(vi)(B); 40 CFR Section 63.463(e)(3)(i); Minn. R. 7011.7200	The Permittee shall ensure that the manufacturer's specifications for determining the minimum proper dwell time within the superheated vapor system are followed. An exceedance has occurred if the above requirement has not been met.
28.0		CD	40 CFR Section 63.463(e)(2)(vi)(C); 40 CFR Section 63.463(e)(3)(i); Minn. R. 7011.7200	The Permittee shall ensure that parts remain within the superheated vapor for at least the minimum proper dwell time. An exceedance has occurred if the above requirement has not been met.
29.0		CD	hdr	MONITORING REQUIREMENTS
30.0		CD	40 CFR Section 63.466(a)(2); 40 CFR Section 63.466(a); Minn. R. 7011.7200	Weekly Temperature Monitoring: The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode. The temperature shall be monitored and the results recorded on a weekly basis.
31.0		CD	40 CFR Section 63.466(d)(2); Minn. R. 7011.7200	Wind speed monitoring: The Permittee shall conduct an initial monitoring test and, thereafter, monthly monitoring tests of the wind speed within the enclosure using the procedure specified in (i) and (ii) below and a monthly visual inspection of the enclosure to determine if it is free of cracks, holes and other defects. (i) Determine the direction of the wind current in the enclosure by slowly rotating a velometer inside the entrance to the enclosure until the maximum speed is located. (ii) Record the maximum wind speed.
32.0		CD	hdr	RECORDKEEPING REQUIREMENTS



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33.0		CD	40 CFR Section 63.467(a); Minn. R. 7011.7200	<p>The Permittee shall maintain the following records in written or electronic form for the lifetime of the degreaser:</p> <ul style="list-style-type: none"> - Owner's manuals, or if not available, written maintenance and operating procedures, for the solvent cleaning machine and control equipment. - The date of installation for the solvent cleaning machine and all of its control devices. If the exact date of installation is not known, a letter certifying that the degreaser and its control devices were installed prior to, or on, November 29, 1993, or after November 29, 1993, may be substituted. - Records of the halogenated HAP solvent content for each solvent used in the degreaser.
34.0		CD	40 CFR Section 63.467(b); Minn. R. 7011.7200	<p>The Permittee shall maintain the following records, in written or electronic form, for a period of 5 years:</p> <p>(1) The results of control device monitoring required under 40 CFR Section 63.466, which includes (a) the temperature at the center of the superheated solvent vapor zone, (b) the speed of the hoist (c) wind speed within the enclosure.</p> <p>(2) Information on the actions taken to comply with the applicable requirements of 40 CFR Section 63.463(e), including records or written or verbal orders for replacement parts, a description the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.</p> <p>(3) Estimates of annual solvent consumption for each solvent cleaning machine.</p>
35.0		CD	hdr	REPORTING REQUIREMENTS
36.0		CD	40 CFR Section 63.471(b)(2); Minn. R. 7011.7200	Trichloroethylene: less than or equal to 31020 pounds/year based on a 12-month rolling sum to be calculated by the 15 day of each month for the previous 12-month period as described later in this permit.
37.0		CD	40 CFR Section 63.471(b)(1); Minn. R. 7011.7200	Solvent Additions/Deletions Log: The permittee shall maintain a log of solvent additions and deletions for each solvent cleaning machine.
38.0		CD	40 CFR Section 63.471(c)(1); Minn. R. 7011.7200	<p>Clean Liquid Solvent: The permittee shall, on the first operating day of every month, ensure that each solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soiled materials. A fill line must be indicated during the first month the measurements are made.</p> <p>The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in paragraphs (c)(2) and (3) of this section.</p> <p>The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.</p>
39.0		CD	40 CFR Section 63.471(c)(2); Minn. R. 7011.7200	<p>Monthly Solvent Emissions Equation: The Permittee shall, on the first operating day of the month, using the records of all solvent additions and deletions for the previous month, determine solvent emissions (Eunit) from each solvent cleaning machine using the following equation:</p> $\text{Eunit} = \text{SA} - \text{LSR} - \text{SSR}$ <p>Eunit = The total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent month (pounds of solvent per month) SA = The total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent month (pounds of solvent per month) LSR = The total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent month (pounds of solvent per month) SSR = The total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph (c)(3) of this section, during the most recent month (pounds of solvent per month).</p>
40.0		CD	40 CFR Section 63.471(c)(3); Minn. R. 7011.7200	<p>Solid Solvent Removed (SSR): The permittee shall, on the first operating day of the month, determine SSR using the method specified in paragraph (c)(3)(i) or (c)(3)(ii) of this section.</p> <p>(i) From tests conducted using EPA reference method 25d. (ii) By engineering calculations included in the compliance report.</p>



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41.0		CD	40 CFR Section 63.471(c)(4); Minn. R. 7011.7200	<p>12-month rolling total (unit): The Permittee shall on the first operating day of the month, determine the 12-month rolling unit total emissions, EunitTotal, for the 12-month period ending with the most recent month for all units using a halogenated HAP solvent, using the equation below:</p> $\text{EunitTotal} = \text{Sum} (\text{Eunit1} + \text{Eunit2} + \dots + \text{Eunit12})$ <p>Where:</p> <p>EunitTotal= The total halogenated HAP solvent emissions for a particular unit over the preceding 12 months (pounds) Eunit1= The total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent month (pounds of solvent per month) Eunit2 + ... + Eunit12 = The total halogenated HAP solvent emissions from the solvent cleaning machine from the previous 11 months (pounds)</p>
42.0		CD	40 CFR Section 63.471(h); Minn. R. 7011.7200	<p>Emission Report: The Permittee shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified below.</p> <p>(1) The average monthly solvent consumption for the affected facility in pounds per month. (2) The 12-month rolling total solvent emission estimates calculated each month using the method as described in 40 CFR Section 63.471(c). (3) This report shall be combined with the annual report listed in Table B of this permit, as required in Sec. 63.468(f) and (g) into a single report for each facility.</p>
43.0		CD	40 CFR Section 63.471(d); Minn. R. 7011.7200	<p>Exceedance: If the applicable facility-wide emission limit presented in Table 1 of paragraph (b)(2) is not met, an exceedance has occurred. All exceedances shall be reported as required in Sec. 63.468(h).</p>
44.0		CD	40 CFR Section 63.463(e)(4); 40 CFR Section 63.468(h); Minn. R. 7011.7200	<p>Exceedant report: Include the following information in the semi-annual or quarterly (as applicable) exceedance report required under Table B:</p> <ul style="list-style-type: none"> - Information on the actions taken to comply with 40 CFR Section 63.463(e). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. - If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. - If no exceedance has occurred, or if a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.
45.0		CD	40 CFR Section 63.468(i); Minn. R. 7011.7200	<p>Exceedant report reduced frequency: An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the following conditions are met:</p> <ul style="list-style-type: none"> - The source has demonstrated a full year of compliance without an exceedance. - The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart. - The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).
46.0		S/A	40 CFR Section 63.463(e)(4); 40 CFR Section 63.468(h); Minn. R. 7011.7200	<p>Report: due 30 days after end of each calendar half-year starting 08/09/2001 (Exceedance Report), unless the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred, follow a quarterly reporting format until a request to reduce reporting frequency under 40 CFR Section 63.468 (i) is approved. The exceedance report shall include the applicable information described in Table A, Subject Item EU001, under the subheading "REPORTING REQUIREMENTS."</p>



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47.0		S/A	40 CFR Section 63.468(f); Minn. R. 7011.7200	<p>Annual Report: due 32 days after end of each calendar year starting 08/09/2001, to include the following information:</p> <ul style="list-style-type: none">- A signed statement from the facility owner or his designee stating that "All operators of solvent cleaning machines have received training on the proper operation of solvent cleaning machines and their control devices sufficient to pass the test required in 40 CFR Section 63.463(d)(10)."- An estimate of solvent consumption for each solvent cleaning machine during the reporting period.
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