

1

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code (OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as

2

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

3

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

4

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

5

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Electro Prime Rossford Inc** located in **Wood** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Curing oven
burners

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>
K001	Electro-cathodic water based coating line with curing oven for
K001 Cont'd	miscellaneous metal parts

Facility Name: **Electro Prime Rossford Inc**
Application Number: **04-1140**
Date: **February 3, 1999**

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burners

BAT
Determination

Water based
coatings and
restriction on
VOC content
and usage

Compliance
with the Air
Toxics Policy

Convection
natural gas
fired oven;
6 MMBTU
natural gas

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
				Condition A.2.
		3745-23-06*** (B)	Permit Allowable	
		3745-21-08*** (B)	Mass Emissions	
	Applicable		and/or	
	Federal &		Control/Usage	
	<u>OAC Rules</u>	3745-31-05	<u>Requirements</u>	
3745-21-09				from the oven
(U) (1) (i) *				burner exhaust:
3745-31-05**			0.09 pound VOC	0.05 pound/hour
3745-31-28			emitted per	PM
112 (g)			gallon of resin	0.20 ton/year PM
			and 1.07 pounds	0.004 pound/hour
			VOC per gallon	SO ₂
			of paste,	0.02 ton/year
			excluding water	SO ₂
			and exempt	0.59 pound/hour
			solvents	NO _x
				2.58 tons/year
				NO _x
			from the paint	0.49 pound/hour
			curing oven:	CO
			14 pounds/hour	2.16 tons/year
			VOC	CO
			43.0 tons/year	0.06 pound/hour
			VOC	VOC
				0.3 ton/year VOC
			14 pounds/hour	
			glycol ether	
			43.0 tons/year	
			glycol ether	
3745-17-17			20 percent	
			opacity	
3745-17-10				
(B) (1) *				
3745-18-06			See Additional	
(A)			Special Term and	

Facility Name: **Electro Prime Rossford Inc**
Application Number: **04-1140**
Date: **February 3, 1999**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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* This applicable rule is less stringent than the rule that resulted in the emission limitation.

** This emissions limitation is based on Method 24 for the resin and the paste. The emissions from the curing oven will be higher due to the cross linking of the resin in the curing oven. It is estimated that approximately 7 times more VOC or HAPs will be emitted at the stack than what is predicted from the material balance based on Method 24 for the resin.

*** The emissions limitations established by this applicable rule is equivalent to the limitation established by the BAT determination of OAC rule 3745-31-05.

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM	0.20
SO ₂	0.02
NO _x	2.58
CO	2.16
VOC	43.3
Glycol ether	43.0

CONSTRUCTION STATUS

The **Toledo Division of Environmental Services** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: **K001 - new electrocoating line.**

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Toledo Division of Environmental Services, 348 South Erie Street, Toledo, OH 43602.**

WASTE DISPOSAL

10

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering

practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Toledo Division of Environmental Services, 348 South Erie Street, Toledo, OH 43602.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Operational Restrictions

1. Electroprime, Inc. shall employ materials for K001 as specified below:

Electrodeposition Coating: 0.09 lb VOC/gal resin minus water and exempt solvents

1.07 lbs VOC/gal paste minus water and exempt solvents

2. The emissions of volatile organic compounds or HAPs from emission unit K001 shall not exceed 43.0 tons per year respectively, based on a rolling 12-month summation of the monthly emissions.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of VOCs (Tons) or HAPs (Tons)</u>
1	3.6
1-2	7.2
1-3	10.7
1-4	14.3
1-5	17.9
1-6	21.5
1-7	25.1
1-8	28.6
1-9	32.2
1-10	35.8
1-11	39.4
1-12	43.0

After the first 12 calendar months of operation following the issuance of

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

this permit, compliance with the annual emission limitation for Volatile Organic Compounds (VOC) or HAPs shall be based upon a rolling, 12-month summation of the monthly emissions, respectively.

3. The permittee shall burn only natural gas in this emissions unit.

B. Monitoring and Recordkeeping Requirements

1. Electro Prime, Inc. shall collect and record the following information each day for K001:
 - a. the name and identification number of each gallon of resin and paste applied;
 - b. the VOC & HAP contents (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each resin and paste applied;
 - c. the daily volume-weighted average VOC and HAP content of all resin and paste applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for $C_{VOC,1}$;
 - d. the total number of hours the emissions unit was in operation;
 - e. the daily emission of VOC and HAPs, calculated as the number of gallons of resin and paste multiplied by the emission factor(s) determined during the most recent stack test that demonstrated the emissions unit was in compliance;
 - f. the average hourly VOC & HAP emission rate, i.e., (e)/(d), in pounds per hour (average); and,
 - g. the rolling 12-month average VOC & HAP emission rates, in tons per year.
2. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

C. Reporting Requirements

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

1. Electro Prime, Inc. shall notify the Toledo Division of Environmental Services of any daily record showing noncompliance. A copy of such record shall be sent to the Toledo Division of Environmental Services within 45 days following the end of the calendar month.
2. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. an identification of each day during which the VOC content exceeded 0.09 lb/gal of resin or 1.07 lbs/gal of paste, excluding water and exempt solvents; the actual lb VOC/gal of resin and the actual lb/gal of paste for such day;
 - b. an identification of each day during which the average hourly organic compound emissions exceeded 14 pounds per hour, and the actual average hourly organic compound emissions for each such day;
 - c. an identification of each day during which the average hourly hazardous air pollutant (HAP) emissions exceeded 14 pounds per hour, and the actual average hourly HAP emissions for each such day; and,
 - d. an identification of all exceedances of the rolling, 12-month emission limitation for volatile organic compounds (VOCs) or HAPs, respectively, from K001 and for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels.
3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.
4. The permittee shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Toledo Division of Environmental Services; and,
 - b. except as otherwise may be provided, quarterly written reports of (1) any deviations (excursions) from emission limitations, operational parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (2) the probable cause of such deviations, and (3) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the City of Toledo, Division of

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

Environmental Services, 348 South Erie St., Toledo, Ohio 43602. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06).

D. Testing Requirements

1. Compliance with the emission limitation(s) of the Permit to Install shall be determined in accordance with the following methods:

- a. Emission Limitation

0.09 pound VOC per gallon of resin,
1.07 pounds VOC per gallon of paste, both excluding water and exempt solvents.

Applicable Compliance Method

Compliance shall be demonstrated in accordance with OAC rule 3745-21-04(B)(5). USEPA Method 24 shall be used to determine the VOC contents of the resin or paste. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular resin or paste, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

- b. Emission Limitations

14.0 lbs/hr volatile organic compound (VOC)
14.0 lbs/hr glycol ether (HAP)

Applicable Compliance Method

Multiply the VOC emission factor, in pounds VOC per gallon of coating excluding water and exempt solvents, determined by the

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

most recent stack test which demonstrated compliance, with the VOC emission limitation by the coating daily average usage rate. Do the same thing for the HAP. If required, the permittee shall also demonstrate compliance by Method 18, 25 or 25A of 40 CFR Part 60, Appendix A.

c. Emission Limitations

43.0 TPY volatile organic compound (VOC)

43.0 TPY glycol ether (HAP)

Applicable Compliance Method

Compliance shall be demonstrated through compliance with the pounds per hour VOC and HAP emission limitations and the recordkeeping requirements of Section B, Monitoring and Recordkeeping Requirements.

d. Emission Limitations

0.05 lb/hr particulate matter (PM)

0.004 lb/hr sulfur dioxide (SO₂)

0.59 lb/hr nitrogen oxides (NO_x)

0.49 lb/hr carbon monoxide (CO)

0.06 lb/hr organic compounds (VOC)

Applicable Compliance Method

Compliance shall be demonstrated by the recordkeeping requirements of Section B, Monitoring and Recordkeeping Requirements. The permittee may also demonstrate compliance by multiplying the AP-42 emission factors (March of 1998) for natural gas combustion from Tables 1.4-1 and 1.4-2 by the maximum hourly gas burning capacity (BTU/hr) times the two burners and the conversion factor of 1 ft³/1020 BTU.

<u>Pollutant</u>	<u>AP-42 Emission Factor</u> <u>(lb/10⁶ scf)</u>
PM	7.6
SO ₂	0.6
NO _x	100

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

CO	84
OC	11

e. Emission Limitations

0.20 TPY particulate matter (PM)
0.02 TPY sulfur dioxide (SO₂)
2.58 TPY nitrogen oxides (NO_x)
2.16 TPY carbon monoxide (CO)
0.03 TPY organic compounds (OC)

Applicable Compliance Method

Compliance with the emission limitations of Section D.1.d., Testing Requirements, shall be considered adequate demonstration of these limitations.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. the emission testing shall be conducted within 180 days after issuance of the this permit;
 - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for volatile organic compounds and hazardous air pollutants (glycol ether); and,
 - c. the emissions testing shall determine the VOC emissions factor(s) relating the VOC content of the resin and paste determined by Method 24 to the VOC emissions from the stack determined by Method 25, in pounds VOC emitted per gallon of resin and paste.
3. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC and HAPs, Method 18, 25 or 25a of 40 CFR Part 60, Appendix A.
4. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services.

E. Miscellaneous Requirements

1. This permit allows the use of coatings and cleanup materials specified by the permittee in the application for PTI 04-1140. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the HAP emission limitation specified in this permit was established in accordance with the Ohio EPA's "Air Toxics Policy" and is based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the "Screen3" modeling program and a comparison of the

predicted 1 hour maximum ground-level concentration to the MAGLC. The following summarizes the results of the modeling for each pollutant:

Pollutant: glycol ether (2-butoxy ethanol)

TLV (ug/m³): 120,000

Maximum Hourly Emission Rate (lbs/hr): 14.0

Predicted 1 Hour Maximum Ground-Level Concentration (ug/m³): 624.3

Facility Name: **Electro Prime Rossford Inc**

Application Number: **04-1140**

Date: **February 3, 1999**

Maximum Ground-Level Concentration (MAGLC) ($\mu\text{g}/\text{m}^3$): 2857

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Toledo Division of Environmental Services are required, including the possible issuance of modifications to PTI number 04-1140 and the operating permit:

- a. any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table;
- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased stack height) that would result in an exceedance of any MAGLC specified in the above table;
- c. a reduction in the TLV by the ACGIH for any of the coatings and cleanup materials that, at the maximum hourly emission rate specified in the above table, would result in an exceedance of the new MAGLC;
- d. any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01;
- e. any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)]; and,
- f. any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).