State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

03/27/07

CERTIFIED MAIL

RE: Final Chapter 3745-35 Permit To Operate General Permit

Stillwater Technologies, Inc. (08-55-14-0484)
Steve Slanker
1040 South Dorset Road
Troy, OH 45373

Dear Steve Slanker:

The enclosed General Permit(s) to Operate allow you to operate the described emissions unit(s) in the manner indicated for each Permit as indicated below:

K001 (Misc Metal Parts Paint Booth <8 gals/day) Paint Booth	General Permit 24

The permit for each emissions unit identified in the following pages consists of Section 1, Part I (authorization to operate and General Terms and Conditions), and; Section 2, Part II (facility-wide terms for each General Permit), and Part III (the applicable General Permit for the specified emissions unit). Each permit constitutes a separate and enforceable document.

Because each permit contains several terms and conditions, I urge you to read them carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (800) 329-7518. For more information related to air pollution control in Ohio, visit www.epa.state.oh.us/dapc.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact RAPCA.

Sincerely,

Michael W. Ahern

Michael W. Ahern
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: RAPCA

State of Ohio Environmental Protection Agency

Final General Permit To Operate An Emissions Unit

Effective Date: 03/27/07

Expiration Date: 03/27/12

This document constitutes issuance to:

Facility ID: 08-55-14-0484
Stillwater Technologies, Inc.
1040 South Dorset Road
Troy, OH 45373

of a permit to operate for:

Emissions Unit ID & Permittee Description	Applicable General Permit Terms (see attached)
K001 (Misc Metal Parts Paint Booth <8 gals/day) Paint Booth	General Permit 24

Each permit for each emissions unit identified above consists of Section 1, Part I (authorization to operate and General Terms and Conditions), Section 2, Part II (facility-wide terms for each General Permit), and Part III (the applicable General Permit for the specified emissions unit). Each permit constitutes a separate and enforceable document.

You will be contacted six months prior to the expiration date regarding the renewal of each permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency identified below. Each permit and the authorization to operate the air contaminant source (emissions unit) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC Chapter 3745-35 and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the Ohio EPA District Office or local air agency that is responsible for processing and administering your permit:

RAPCA
117 South Main Street
Dayton, OH 45422-1280
(937) 225-4435

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Part I: General Terms and Conditions

1. Compliance Requirements

The above-described emissions unit is and shall remain in full compliance with all applicable State and federal laws and regulations and the terms and conditions of this permit.

2. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

3. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

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 appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. 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 (i.e., post marked) 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.)

4. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

5. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State and federal air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit.

Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

6. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of this emissions unit(s) that is (are) served by such control system(s).

7. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permittee. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Permit Renewal

Approximately six months prior to the expiration date of this permit, a notice regarding the renewal of this permit will be sent to the permittee's designated facility contact. If you are not contacted, please contact the following Ohio EPA District Office or local air agency which has jurisdiction in the area in which the facility is located:

RAPCA
117 South Main Street
Dayton, OH 45422-1280
(937) 225-4435

It is the permittee's responsibility to renew this permit even if no notice of its expiration is received.

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - Misc. Metal Parts Painting Line <8 General Permit d.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 59.2 pounds per day from coatings, and 11.3 tons per year, including both coatings and cleanup materials. Particulate emissions (PE) shall not exceed 0.551 pounds per hour and 2.4 tons per year from coatings. See Section A.II below. The requirements established pursuant to this rule also include the requirements of OAC rule 3745-21-09(U)(1), OAC rule 3745-17-11(B)(1) and OAC rule 3745-17-07(A)(1)
OAC rule 3745-21-09(U)(2)(e)(i)	See Section A.I.2.a below.
OAC rule 3745-17-11(B)(1)	The requirements established pursuant to this rule are equivalent to the short term particulate emission limitation included in OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	See Section A.I.2.b below.

2. Additional Terms and Conditions

2.a The permittee shall not use more than 8 gallons of coating material per day for the coating of miscellaneous metal parts.

2.b Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

II. Operational Restrictions

1. The permittee shall operate the dry filtration system for control of particulate emissions whenever this emissions unit is in operation.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

2. The permittee shall collect and record the following information each day for this emissions unit:

   a. The name and identification number of each coating employed.

   b. The VOC content of each coating employed, in pounds per gallon, as applied.

   c. The number of gallons of each coating employed.

   d. The total number of gallons of all the coatings employed.

   e. The total VOC emissions from all coatings employed, in pounds [i.e., the summation of (b) x (c) for each coating employed].

3. The permittee shall collect and record the following information for each month for this emissions unit:

   a. The company identification of each cleanup material employed.

   b. The number of gallons of each cleanup material employed.

   c. The VOC content of each cleanup material employed, in pounds per gallon.

   d. The total VOC emissions from all cleanup materials employed, in pounds [i.e., summation of (b) x (c) for each coating employed], in pounds per month.

   e. The amount of cleanup material recovered, in pounds.

   f. The total monthly VOC emissions from cleanup operations, in pounds [i.e., (d) - (e)] .

4. The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, [i.e., the sum of the daily VOC emission rates from the coating materials for the calendar year in Section A.III.2 plus the sum of the monthly emissions from cleanup materials for the calendar year in Section A.III.3].

IV. Reporting Requirements

1. The permittee shall notify the Director (appropriate District Office or local air agency) in writing of any record showing that the dry filtration system was not in service when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (appropriate District Office or local air agency) within 30 days after the event occurs.

2. The permittee shall notify the director (appropriate District Office or local air agency) in writing of any daily record showing that the coating line employed more than the applicable maximum daily coating usage limit of 8 gallons per day. The notification shall include a copy of such record and shall be sent to the Director (appropriate District Office or local air agency) within 30 days after the exceedance occurs.

3. The permittee shall submit quarterly deviation reports that identify each day the VOC emissions exceeded the daily emissions limit specified above.

   The quarterly deviation reports shall be submitted to the Director (appropriate District Office or local air agency) in accordance with the General Terms and Conditions. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarter.

4. The permittee shall submit annual compliance reports that include:

   a. a list of all allowable emissions limits and operational restrictions in Section A.I.1 , A.I.2 and A.II; and

   b. a statement whether the emissions unit is in compliance with the requirements listed.

   The report shall be submitted to the Director (the appropriate District Office or local air agency) by February 1 of each year and shall cover the previous calendar year.

   Annual Compliance Certification reports submitted according to the requirements of the Title V program are sufficient to meet this requirement.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

   a. Emissions Limitation:
   8 gallons per day total coating usage

   Applicable Compliance Method:
   Compliance shall based upon the record keeping specified in Section A.III.2.d.

   b. Emissions Limitation:
   59.2 lbs per day of VOC emissions from coatings

   Applicable Compliance Method:
   Compliance shall based upon the record keeping specified in Section A.III.2.e.

   c. Emissions Limitation:
   11.3 TPY of VOC emissions from coatings and cleanup materials

   Applicable Compliance Method:
   Compliance shall based upon the record keeping specified in Section A.III.4.

   d. Emission Limitation:
   0.551 lb of PE per hour

   Applicable Compliance Method:
   To determine the worst case PE rate, the following equation shall be used:

   E = maximum coating solids usage rate, in pounds per hour, x (1-TE) x (1-CE)

where E = PE rate (lbs/hr);

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.55); and

CE = fractional control efficiency of the control equipment (0.99).

When requested by the Ohio EPA, the permittee shall demonstrate compliance with the above emissions limitation pursuant to OAC rule 3745-17-03(B)(10).

e. Emission Limitation:
2.41 tons of PE per year

Applicable Compliance Method:
Compliance with the lb/hr emission limit demonstrates compliance with this limit because this limit is based on the lb/hr limit assuming the source operated 8760 hours per year.

f. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
When requested by the Ohio EPA, compliance with the above visible emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9.

2. In accordance with OAC rule 3745-21-04(B)(5), facilities located in Ashtabula, Butler, Clark, Clermont, Cuyahoga, Delaware, Franklin, Geauga, Greene, Hamilton, Lake, Licking, Lorain, Lucus, Mahoning, Medina, Miami, Montgomery, Portage, Stark, Summit, Trumbull, Warren and Wood Counties shall use USEPA Method 24 to determine the VOC contents of the coatings. 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 coating, 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.

US EPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment - Misc. Metal Parts Painting Line <8 General Permit d.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None.	None.

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

1. Prior to the use of any coating in this coating line, the permittee shall determine that the coating meets the toxic screening criteria described below.

Purpose: The purpose of this test is to evaluate coatings to determine if the chemical compounds in the coatings would be emitted at acceptable levels for the general permit.

Data Needed: (1) MSDS sheet for each coating to be evaluated. (2) information on the maximum coating usage rate for the line as discussed in Step 1 below.

Step 1. Using the following factors, calculate the maximum coating usage rate in terms of gallons per hour:

a. Assume the coating line operates at its maximum speed while still making usable product.

b. Assume the coating line is operating at its largest coating laydown rate. This would typically be accomplished by assuming the coating line is painting the largest part available.

Step 2. Review the material safety data sheet (MSDS) for the coating. Note each chemical compound listed, its TLV and the percent by weight of the chemical compound in the coating.

Step 3. Determine if any of the chemical compounds listed in the MSDS are also listed in the following table. If any of the chemical compounds are listed in the table, then calculate the maximum annual emission of that compound by multiplying the maximum coating usage rate times the percent by weight of each chemical compound. Then multiply the result by 8760

hours per year. The result will be in pounds per year.

Check to see if the calculated emission rate is less than the allowable emission rate found in the below table. If all of the compounds emitted have a maximum annual emission of less than the allowed rate, then move on to step 4. If any of the compounds are emitted at a rate higher than the allowed emission rate, then contact your appropriate District Office or local air agency contact to determine if you can use the coating.

Chemical Compound	CAS	Molecular Weight (MW)	Allowed Emission Rate (lb/year)
arsenic compounds, as As	7440-38-2	74.92	1.70
benzene	71-43-2	78.11	1100
benzidine	92-87-5	184.23	5.60
benzo(a)pyrene	50-32-8	252.30	6.90
beryllium (and Be compounds)	7440-41-7	9.01	0.350
Cadmium	7440-43-9	112.4	5.20
Chromium	7440-47-3	varies	0.690
Hexachlorobenzine (HCB)	118-74-1	289.78	35.0
mercury (and Hg compunds)	7439-97-6	200.59	0.1
nickel (Ni subsulfide)	12035-72-2	240.19	17.0
Poloychlorinated dibenzo-p-dioxins	1746-01-6	varies	0.030
Poloychlorinated dibenzofurans	132-64-9	varies	0.030
polychlorinated biphenyls (PCBs, arcolors)	1336-36-3	varies	87.0
vinyl chloride	75-01-4	62.50	2000

Step 4. Find all of the chemical compounds in the coating that have a listed American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV). For each chemical compound with a listed TLV (other than those in the above table), calculate the maximum short-term emission rate by multiplying the maximum coating usage rate times the percent by weight of each chemical compound. The result should be in terms of pounds of the chemical compound per hour.

Step 5. Determine if the compound will be emitted at or below the acceptable rate. This is done by searching the following table for the chemical compound's TLV and then determining the maximum allowed emission rate listed in the below table. (Note. If the TLV is listed as ppm, then convert the TLV to $\mu g/m^3$ by using the following formula: (TLV in ppm)x(MW)x(1000)/24.45 = TLV in $\mu g/m^3$; where MW is the molecular weight of the compound.) This table lists the allowable emission rates for compounds with a TLV between the high range and low range. Compare the maximum calculated short-term emission rate of each chemical compound to the allowed emission rate in the table. If the maximum emission rate is less than the allowed emission rate, then the chemical compound is emitted at an acceptable rate.

TLV Range (µg/m^3) (The TLV must be less than the high value listed and greater than or equal to the low value listed)		Allowed Emission Rate (lb/hr)
15	1	0.000067
30	15	0.0010
60	30	0.0020
120	60	0.0040
240	120	0.0080
480	240	0.0160
960	480	0.0320
1,920	960	0.0640
3,840	1,920	0.128
7,680	3,840	0.256
15,360	7,680	0.512
30,720	15,360	1.02
61,440	30,720	2.05
122,880	61,440	4.10
245,760	122,880	8.19
491,520	245,760	16.4
983,040	491,520	32.8
1,966,080	983,040	65.5
3,932,160	1,966,080	131

Step 6. Check each chemical compound that has a listed TLV. If all compounds are emitted at a rate less than the allowed emission rate, then the coating passes the toxic screening test and can be used under this permit. If one or more of the chemical compounds are emitted at a rate greater than the allowed emission rate, then you should contact your appropriate District Office or local air agency contact to determine if you can use the coating.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the results of any toxic screening evaluations done per term II.1.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None