

**Environmental Cooperative Agreement  
between  
Northern Engraving Corporation  
and  
Wisconsin Department of Natural Resources**

IN WITNESS WHEREOF, the parties by their signatures shall cause this agreement to be executed on the date specified.

Signed for and on behalf of:



STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By: Darrell Bazzell Date: 6/10/02

Darrell Bazzell  
Secretary

Signed for and on behalf of:

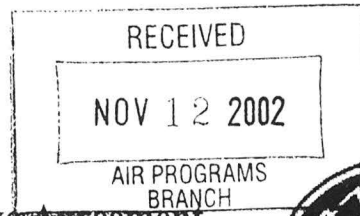
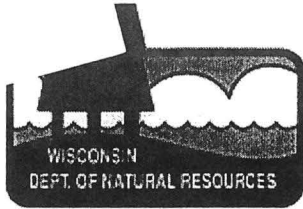


NORTHERN ENGRAVING CORPORATION

By: [Signature] Date: 6/10/02

Philip M. Gelatt  
President





**Environmental Cooperative Agreement  
Between  
Northern Engraving Corporation and  
Wisconsin Department of Natural Resources**

This Agreement is being entered into, pursuant to sec. 299.80 Wisconsin Statutes and represents the negotiated and agreed to conditions agreed upon by Wisconsin Department of Natural Resources (WDNR) and Northern Engraving Corporation (NEC), for the purpose of providing an alternative method for the regulation of environmental impacts from Northern Engraving Corporation

FOR AND IN CONSIDERATION of the terms and conditions contained in this agreement, WDNR and Northern Engraving Corporation set forth the following:

WHEREAS, Northern Engraving Corporation ("NEC") is a manufacturer with multiple facilities and affiliated companies located in Wisconsin, Iowa and Minnesota.

WHEREAS, the Wisconsin Department of Natural Resources ("WDNR") is a duly organized agency of the State of Wisconsin created pursuant to Wis. Stat. § 15.34.

WHEREAS, the WDNR has been legislatively delegated authority to regulate, among other things, air pollution, hazardous waste, solid waste, recycling, water pollution, and sewage within the State of Wisconsin. This authority having been delegated pursuant to Wis. Stat. §§ 281.12, 285.11, 285.13, 289.06, 289.07, 291.09 and 291.11, among other statutes.

WHEREAS, the WDNR has been delegated, authorized or otherwise approved by the federal government to implement all or a significant portion of the following federal programs:

- The Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.;
- The Solid Waste Disposal Act, as amended, 42 U.S.C. § 6901 et seq; and
- The Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.

WHEREAS, the WDNR has consulted with and obtained concurrence from the United States Environmental Protection Agency ("EPA") over the terms and conditions set forth in this Agreement as well as the procedural mechanisms necessary to effectuate any experimental changes to federal programs, or federally approved state programs, which may be required as a result of this Agreement.

WHEREAS, the WDNR has entered a Memorandum of Agreement with the EPA dated March 25, 1999 entitled "Implementation of the Joint State/EPA Agreement to Pursue Regulatory Innovation and the Wisconsin Environmental Cooperation Pilot Program" (the "Joint State/EPA Agreement"). Among other things, the Joint State/EPA Agreement defines how WDNR and EPA will develop, implement and pursue enforcement against participants in the Wisconsin Environmental Cooperation Pilot Program (the "Program").

WHEREAS, WDNR and EPA assent in the Joint State/EPA Agreement that the innovation and experimental methods set forth in agreements such as this, inherently involve some risk of failure. Regardless, the WDNR and EPA have agreed to promote innovations at all levels of environmental regulation, through agreements

such as this, to increase the efficiency and effectiveness of the environmental programs each implements.

WHEREAS, the WDNR and NEC have entered into this Agreement pursuant to Wis. Stat. § 299.80 to allow the WDNR, EPA and NEC to implement and evaluate innovative environmental regulatory methods.

WHEREAS, this Agreement seeks to grant NEC greater flexibility than would otherwise be allowed under current federal and state environmental programs, including but not limited to those implemented pursuant to Wis. Stat. ch. 280 through 295 and the rules promulgated thereunder.

WHEREAS, the WDNR and NEC seek to reduce the time and resources they each spend on paperwork and other administrative tasks related to environmental regulation that do not result in benefits to the environment.

WHEREAS, the WDNR and NEC acknowledge that each is entering into this Agreement on a voluntary basis.

WHEREAS, the WDNR recognizes that the main goal in the Wisconsin Environmental Cooperation Pilot Program, Wis. Stat. § 299.80, is to establish a collaborative process involving business, government and the public in order to reach consensus that is a "win" for each sector.

WHEREAS, the WDNR and EPA have entered the Joint State/EPA Agreement whereby each assents that this Agreement must be implemented to meet the following goals:

- Provide at least the same level of protection of public health and the environment as current regulations.
- Encourage systematic assessment of direct and indirect environmental impacts of the facilities covered by this Agreement.
- Encourage efficiency and cost effective, verifiable pollution reduction strategies.
- Encourage superior environmental performance, minimize transfers of waste and achieve a balance among economic, social and environmental impacts.
- Recognize and reward leading companies in the area of environmental performance.
- Encourage the transfer of information.
- Consolidate environmental permitting and approval requirements.
- Grant regulatory flexibility in the environmental area.
- Reduce government and facility transaction costs for paperwork and other administrative tasks.
- Encourage public participation and consensus.
- Improve public information and access to environmental performance information.
- Encourage facilities to work with communities.
- Increase trust among government, facility owners/operators and the public.



WHEREAS, the WDNR and EPA have entered the Joint State/EPA Agreement whereby EPA assents that when federal action is necessary for implementation of an innovation under this Agreement, EPA will promptly determine what is required in order to take such action and take that action.

WHEREAS, the WDNR and EPA have entered the Joint State/EPA Agreement whereby EPA commits to consult with WDNR before taking any regulatory or enforcement action concerning NEC so long as NEC is operating pursuant to this Agreement.

WHEREAS, the WDNR and EPA have entered into the Joint State/EPA Agreement whereby each assents that the Program provides for waivers, variances and modifications to the existing regulations, policies, guidance and practices of traditional environmental programs.

WHEREAS, EPA and WDNR have entered the Joint State/EPA Agreement acknowledging that to the extent this Agreement affects requirements under a federally-authorized or delegated program, the requirements of this Agreement replace those previously in affect under such programs and this Agreement becomes the requirement applicable to and legally binding upon NEC.

THEREFORE, in reliance upon the foregoing, including the State and EPA commitments in the Joint State/EPA Agreement, and in consideration of the terms and conditions set forth in this Agreement, as well as other valuable considerations having been duly received, the WDNR and NEC enter into this Agreement pursuant to Wis. Stat. § 299.80 for the purpose of providing alternative methods for the regulation of environmental impacts from covered NEC facilities. In furtherance of this Agreement, the parties agree to the following contents of this agreement.

---

## CONTENTS

I.	Facility Information/Contacts .....	page 4
II.	Definitions.....	page 6
III.	Period of Agreement .....	page 6
IV.	Amendment/Revocation of the Agreement .....	page 7
V.	Entire Agreement .....	page 7
VI.	Approvals Covered .....	page 8
	Air Quality Permits.....	page 8
VII.	Interested Persons Group .....	page 9
VIII.	Commitment to Environmental Management System .....	page 10
IX.	Commitment To Superior Environmental Performance .....	page 10
X.	Pollution Limits .....	page 12
XI.	Operational Flexibility and Variances .....	page 12

XII.	Baseline Performance Evaluation And Reporting .....	page 14
XIII.	Reporting of Violations.....	page 16
	a. Enforcement Deferral.....	page 16
	b. Amendment or Revocation of Agreement/Confidential Information.....	page 16
XIV.	Applicable Law .....	page 17
XV.	Facility Liaison and Addresses .....	page 17

**Appendixes:**

- A. Waste reduction activities at two NEC facilities
- B. Emission reduction activities at two NEC facilities
- C. Specific Permit Conditions/Support Documentation
  - C1. Draft Specific Permit Conditions under the Environmental Cooperative Agreement for NEC’s Holmen facility
  - C2. Support Document for the NEC Holmen Facility's Operation Permit
  - C3. Draft Specific Permit Conditions under the Environmental Cooperative Agreement for NEC’s Sparta facility
  - C4. Support Document for the NEC Sparta Facility’s Draft Operation Permit
- D. Draft Source-Specific Revisions to Wisconsin's State Implementation Plan
- E. Justification for discontinuing the use of the incinerator at NEC - Sparta
- F. NEC’s Environmental Policy Statement

**I. FACILITY INFORMATION:**

Northern Engraving Corporation (NEC) is a medium sized, privately held, family owned nameplate manufacturer with multiple facilities and affiliated companies located in Wisconsin, Iowa and Minnesota. Their customers vary widely in size and conduct business both in the USA and internationally.

Northern Engraving Corporation  
 803 South Black River Street  
 Sparta, WI 54656  
**FID# 642025010**

Northern Engraving Corporation  
 1023 Sand Lake Road  
 Holmen, WI 54636  
**FID# 63200970**

**Contacts:**

Bruce Corning  
VP Management Systems  
(608) 269-6911 Ext. 481

Randy Nedrelo  
Solid and Hazardous Waste Manager  
(608) 269-6911 Ext. 281

Northern Engraving manufactures nameplates and other industrial decoratives, using plastic and aluminum as the primary substrates. Presently Northern Engraving operates five manufacturing facilities in Wisconsin and Iowa. In addition there are several locations that provide support services to these manufacturing facilities. Northern Engraving has had active waste minimization/pollution prevention since 1988, having received recognition for its efforts on several occasions. Included are the Governor's Award for Excellence in Hazardous Waste Reduction in 1991 and 2000 and a P/E/P Award in 1994.

**Sparta**

The Sparta site is located at 803 Black River Street, Sparta, Wisconsin, a community consisting of roughly 8,000 residents. The site includes a manufacturing facility and the corporate offices. Northern Engraving, Sparta achieved ISO 14001 registration in March of 1999 and ISO 9001 registration in March of 2000. The manufacturing facility currently produces decorated aluminum nameplates among other things. A variety of processes are used in the manufacturing process, including spraying, roll coating, screen-printing, lithographic printing, metal preparation, punch press, and assembly.

Sparta is located in an area that is classified as attainment ("Nonattainment area" means an area identified by the department in a document prepared under s. 285.23 (2), where the concentration in the atmosphere of an air contaminant exceeds an ambient air quality standard.) In 1995 Northern Engraving Sparta submitted a Part 70 Operation Permit application. On September 22, 1999 Northern Engraving submitted a draft proposal to the Department of Natural Resources that would consider them for the Environmental Cooperative Compliance Program (ECPP). Because of substantial reduction in Volatile Organic Compounds (VOCs) emissions and Hazardous Air Pollutants (HAPs), Northern Engraving Corporation revised its application in 2000, requesting limits be established for a Synthetic Minor, Non-Part 70 source under the ECPP. Currently the roll coating and metal spraying processes are subject to RACT requirements.

**Holmen**

The Holmen site is located at 1023 Sand Lake Road, Holmen, Wisconsin, a community of roughly 5,000 residents. It currently consists of a manufacturing facility that produces decorated plastic nameplates and decals among other things. The facility employs roughly 250 people, making it the second largest employer in Holmen. A variety of processes are used in the manufacturing process, including roll coating, screen - printing, lithographic printing, punch press, and assembly.

Holmen is located in an area that is classified as attainment for all criteria pollutants. In 1995 Northern Engraving Holmen submitted a Synthetic Minor, Non-Part 70 Operating Permit application. The Holmen facility was included as a participant in the September 22, 1999 draft proposal for the ECPP.



## II. DEFINITIONS.

The following definitions are applicable to this Agreement:

1. "**Approval**" means a permit license or other approval issued by WDNR under chap. 280-295.
2. "**Cooperative agreement**" means this agreement entered into by the WDNR and NEC under section 299.80(6), Wis. Statutes.
3. "**Environmental management system**" means an organized set of procedures implemented by the owner or operator of a facility to evaluate the environmental performance of the facility and to achieve measurable or noticeable improvements in that environmental performance through planning and changes in the facility's operations.
4. "**Environmental performance**" means the effects whether regulated under chapters 280 to 295 or unregulated, of a facility on air, water, land, natural resources and human health.
5. "**Facility**" means all buildings equipment and structures located on a single parcel or on adjacent parcels that are owned or operated by NEC.
6. "**Interested person**" means a person who is or may be affected by the activities at a facility that is covered or proposed to be covered by a cooperative agreement or a representative of such a person.
7. "**Performance evaluation**" means a systematic, documented and objective review conducted by or on behalf of the owner or operator of the facility including an evaluation of compliance with the cooperative agreement covering the facility, approvals that are not replaced by the cooperative agreement and the provision of chapters 280 to 295 and rules promulgated under those chapters for which a variance is not granted.
8. "**Pollutant**" means any of the following: any dredged spoil, solid waste, incinerator residue, sewage, garbage, refuse, oil, sewage sludge, munitions, chemical wastes, biological materials, radioactive substance, heat, wrecked or discarded equipment, rock, sand, cellar dirt, or industrial, municipal, or agricultural waste discharged into water or onto land. Any dust, fumes, mist, liquid, smoke, other particulate matter, vapor, gas odorous substance or any combination of those things emitted into the air but not uncombined water vapor.
9. "**Violation**" means a violation of a cooperative agreement, of an approval that is not replaced by the cooperative agreement or of a provision of chapters 280 to 295 and rules promulgated under those chapters for which a participant has not received a variance.

---

## III. PERIOD OF AGREEMENT.

- 1.) This agreement shall commence, subject to its signing by both parties on June 10, 2002 and continue until June 10, 2007 during which period NEC and the WDNR shall abide by all terms and conditions contained herein.
- 2.) This Agreement may be extended for one additional five year period by following the procedures and obtaining the approvals set forth in Wis. Stat. § 299.80(6e).

---

#### **IV. AMENDMENT/REVOCATION OF THE AGREEMENT**

This Agreement applies only to the facilities listed in Section I of the Agreement, however, WDNR and NEC agree that newly acquired NEC facilities may be considered under the terms of this agreement. The DNR recognizes that Northern Engraving Galesville and Northern Automotive Systems facilities, sharing ownership with NEC, may be included under the provisions of agreement as an amendment, following a formal request by the company, a review of the facility(s) by department staff and discussion of environmental issues to be included. Inclusions of other NEC facilities may be as amendments to this agreement or as a separate agreement determined by both parties.

1.) NEC and WDNR may amend this Agreement upon mutual consent.

The Department may revoke the agreement if NEC is in substantial noncompliance, refuses to amend this agreement, are unable or unwilling to meet commitments to superior environmental performance or have not addressed a substantive issue raised by a majority of the interested persons. (s. 299.80 (7), Wis. Statutes)

2.) The WDNR may amend this Agreement for cause, including any of the following: (1) a change in federal or state environmental laws which necessitate amendment; (2) a violation of this Agreement; or (3) discovering that this Agreement was obtained by misrepresentation or failure to fully disclose all relevant information.

3.) The DNR shall provide at least 30 days for public comment on the proposed amendment or revocation of this cooperative agreement if comments demonstrate considerable public interest in the proposed action. Alternatively, the WDNR may revoke this Agreement, after an opportunity for a hearing, if it finds any of the substantive issues set forth in s. 299.80(7)(c)(2), Wis. Statutes. If the WDNR makes such a finding and revokes this Agreement, such decision shall be considered a final decision for purposes of review under Chapter 227, Wis. Statutes and it shall contain the items enumerated in s. 299.80(7)(c)3 , Wis. Statutes.

4.) Nothing in this Agreement shall be deemed a waiver of NEC's constitutional protections, including, but not necessarily limited to, NEC's rights to substantive and procedural due process, equal protection under law, or the taking of property right.

5.) In the event that this Agreement is revoked, NEC shall resume operations under the conditions stated in Part I B. of Appendix C -- Specific Permit Conditions.

---

#### **V. ENTIRE AGREEMENT.**

1.) This agreement, together with any specifications, referenced parts attachments and effective amendments, shall constitute the entire agreement. Communications or understandings made prior to the signing of this agreement and pertaining to its subject matter are hereby superseded. All revisions to this agreement must be made by a written amendment to this agreement, signed by WDNR and NEC and issued under the same procedures as this agreement.



---

## VI. APPROVALS COVERED.

1.) This agreement serves to cover the following permit conditions and or approvals currently required for the Northern Engraving Sparta and Holmen facilities. Full revisions of existing air permits have been provided which include that part (Part I A. in Appendix C.) that will reflect conditions NEC will be operating by while under the agreement.

### Air Quality Permits

#### Sparta Facility

##### ***Sparta - LACT Permit Requirements:***

*Process P30: Permit 642025010-N01 Condition: I.A.2. Specific Emission Limitation for VOCs*

*EOP-10-KJC-83-42-077 Condition: I.A.5. Specific Emission Limitation for VOCs*

*Process P37: Permit 92-POY-068 Condition: I.B. Specific Emission Limitation for VOCs*

*EOP-10-KJC-83-32-077A Condition I.A.4. Specific Emission limitation for VOCs*

*EOP-10-KJC-83-32-077 Condition I.A.8. Specific Emission Limitation for OCs*

*Process P57: Permit 64025010-N01 Condition I.A.1. Specific Emission Limitation for Ocs*

*Process P91: Permit 93-IRS-040 Condition I.D.1. Specific Emission Limitation for VOCs*

##### ***Sparta - Daily Record keeping Requirements:***

*Permit 92-POY-157 Conditions I.I.A.2.b., I.I.A.2.f., I.I.A.2.g., I.I.C.2.b., I.I.C.2.f., and I.I.C.2.g.*

*Permit 91-POY-088 Conditions I.I.A.2.b., I.I.A.2.d., and I.I.A.2.e.*

*Permit 93-IRS-040 Condition I.I.F.2.b.*

#### Holmen Facility –

##### ***Holmen - LACT Permit Requirements:***

*Process P03: Permit 91-POY-126 Condition: I.D.1. Specific Emission limitation for VOCs*

*Process P08: Permit 91-POY-126 Condition: I.E.1. Specific Emission Limitation for VOCs*

*Process P09: Permit: 91-POY-126 Condition: I.A.1. Specific Emission Limitation for VOCs*

*Alteration EOP-10-KJC-83-32-081 dated May 27, 1987 for PSMG-04, PSO-21H, PSO-11-H, PSO-12-H, PSO-18-H and PSO-19-H*

*Alteration of EOP-10-JKC-83-32-081 dated February 12, 1985*

*Condition: I.A.44.Emission Limitation for Organic Compounds and I.A.50.Emission Limitation for Organic Compounds*

*EOP-10-JKC-83-32-081 Condition: I.A.38. Emission Limitation of Organic Compounds, I.A.39. Emission Limitation of Organic Compounds, I.A.42. Emission Limitation for Organic Compounds*

***Holmen - Daily Record keeping Requirements***

*Permit 91-POY-126 Condition I.II.5.*

*Alteration of permit EOP-10-KJC-83-32-081 dated 2/20/90 Condition I.B.13.*

This agreement only covers those conditions stated in Part I A. of the Specific Permit Conditions (Appendix C) for the Sparta and Holmen facilities.

---

**VII. INTERESTED PERSONS GROUP.**

NEC agrees to facilitate development of an interested persons group. NEC may elect to form one interested persons group that would involve several representatives from each community or one interested persons group for each facility with representatives from that community where the facility is located. NEC will provide information to the department on efforts to establish such groups. The interested persons group(s) will consist of 6-8 participants, representing all the geographical locations of NEC facilities covered by this agreement. The participants in the group will be selected from the following groups or criteria:

1. The interested persons group will include individuals whose residence or place of business is located in county occupied by a NEC facility covered by this agreement. This may include but is not limited to local schools officials, local and/or state officials, County Board Members, Local Emergency Planning Commissions, NEC employees, representatives from local conservation groups, if necessary, and any other organization, individual, or industry representative that may provide valuable input to such group.
2. Membership in the interested persons group will be by invitation only. Participants will be provided no monetary or other compensation for being a member of this group.
3. NEC will commit to resolving substantive issues raised by members of the interested persons group and supported by a majority.
4. Meetings of the interested persons group will be coordinated by NEC and scheduled on a semi-annual basis, unless NEC and Interested Persons may agree to additional meetings where necessary. The interested persons group will be provided an overview of the environmental performance of the covered NEC facilities. The interested persons group will be provided opportunities to comment on NEC's environmental management system, performance evaluations, and other proposed changes by NEC facilities covered under this agreement
5. For each of its covered facilities, NEC will provide an overview of its current environmental objectives and targets and the current environmental programs for achieving those objectives and targets.
6. NEC will provide summary of the interested person's group and related activities in its annual performance evaluation (Section XII). Individual members of the interested persons group will be solicited and encouraged to provide input and suggestions into NEC's efforts regarding its environmental performance. NEC representatives will consider and respond to issues raised by the group. These responses will come in the form of written correspondence and/or further meetings with the group and/or discussions with individual member(s).

7. It is anticipated that many public comments concerning NEC's participation in this Agreement will be solicited during interested persons group meetings or other meetings with community groups. Minutes of these meetings shall be compiled which will include, among other things, a summary of the public comments that were raised. Responses to those comments will be appended to the minutes for easy reference. A copy of these documents shall be made publicly available at NEC offices, local public libraries and other community institutions mutually agreed upon by the interested person's group and NEC.

WDNR has followed the procedures set forth in Wis. Stat. § 299.80(8) before proposing issuance of this Agreement. The interested persons group has been involved in the drafting of this Agreement and the negotiation process between WDNR and NEC. The group has been provided the opportunity to discuss concerns with the Agreement and suggest revisions thereto. This final Agreement reflects the consensus of those negotiations and the input of, among others, the interested persons group.

---

## **VIII. COMMITMENT TO ENVIRONMENTAL MANAGEMENT SYSTEM.**

### **Sparta**

- 1.) NEC agrees to maintain an ISO 14001 registered Environmental Management System (EMS) at this facility.
- 2.) NEC will retain an accredited ISO 14001 third-party auditor to ensure this EMS is maintained in conformance with the current ISO14001 standard. NEC will continue to utilize their EMS process to identify and prioritize environmental aspects and to assist in setting environmental objectives and targets (goals). NEC will meet at regular intervals, in accordance with the provisions of its EMS, to review progress toward accomplishing the objectives and targets.

### **Holmen Facility**

- 3.) NEC agrees to develop Environmental Objectives and Targets, along with the associated Environmental Programs by December 31, 2002 and to achieve ISO 14001 registered for its EMS at the Holmen facility by December 31, 2003. NEC also agrees to retain an accredited ISO 14001 third-party auditor at the Holmen facility for the duration of the agreement.
- 

## **IX. COMMITMENT TO SUPERIOR ENVIRONMENTAL PERFORMANCE.**

NEC agrees to pursue superior environmental performance while achieving a balance between economic, social and environmental impacts from its efforts. NEC commits to continual improvement in environmental performance by annually reassessing its environmental aspects and setting new objectives for improvement. Over the long term they will achieve measurable improvements in its environmental performance through the improved utilization of natural resources.

This agreement serves to test the effectiveness of an Environmental Management System, designed under ISO 14001 requirements, on identifying and finding solutions to those aspects that have the most significant impacts on the environment.

NEC and WDNR recognize as part of this agreement, past voluntary environmental achievements back to

Improved utilization of natural resources.	<p>NEC agrees to, in conformance with its EMS, annually reassess its environmental aspects and develop environmental objectives and targets. NEC further agrees to develop environmental programs to achieve its environmental targets.</p> <p>Over the long term, through improved utilization of natural resources, NEC has achieved reductions in emissions to the air and water, in wastes generated and in the use of energy.</p> <p><b>Annual Performance Report</b></p>
NEC will participate in the baseline data collection protocol for the UNC.	<p>NEC has participated in the survey. NEC will continue to participate in the UNC protocol as needed.</p> <p>NEC has also submitted the EMS design information to UNC.</p>
Record Keeping, Monitoring, and Reporting	NEC and WDNR will work to reduce administrative burdens through the use of simplified record keeping, monitoring and reporting as described in Part I A. of each facility's Specific Permit Conditions. (Appendix C)
Information Sharing	NEC commits to sharing information regarding its means of assessing environmental aspects, developing meaningful environmental objectives and targets, and implementing the environmental programs to achieve superior environmental performance, as defined by the environmental objectives and targets.
Supplier/EMS Criteria	NEC will commit to working with suppliers in developing alternatives to current raw material usage that are more environmentally friendly.
NEC's commitment to public awareness.	NEC commits to establishing an interested persons group and to conduct communications in a meaningful way. NEC will also enhance community awareness of its practices and approaches they are taking to reduce pollution. (See SECTION VII.)

---

## X. POLLUTION LIMITS

With inclusion of those limits identified in Section XI (Operational Flexibility and Variances), NEC commits to abide by all current and future applicable environmental limits. All provisions established in permits or approvals not identified in Part I A. of the Specific Permit Conditions (Appendix C) shall remain in effect.

---

## XI. OPERATIONAL FLEXIBILITY AND VARIANCES

### NOTE:

- a. Refer to Part I. A of Specific Permit Conditions (Appendix C) prepared by Mary



**Carter (WDNR Air Engineer)**

- b. WDNR has conducted a State Implementation Plan (Appendix D).**
- c. Neither of the facilities has ever been considered PSD major sources nor have they ever been issued PSD permits.**

**Sparta and Holmen**

NEC Sparta reduced the amount of VOCs and HAP emissions at its facility (APPENDIX A and B) to levels below the "major source" threshold. Current operations and records indicate that the NEC covered facilities operate and emit at levels normally covered by minor source operational and construction air permits requirements.

As part of this agreement NEC Sparta and Holmen facilities will be allowed to operate under the conditions established in Part I A. Specific Permit Conditions (Appendix C), established in permit No. 632009730-F01 (Holmen), permit No. 642025010-F01 (Sparta), of the year 2002 revised permits for air management operations, until such agreement expires or is terminated under the conditions established in s. 299.80 (7), Wis. Statutes.

To both encourage and facilitate the goals established under Section IX, and in recognition of NEC's past environmental performance, and future commitments to pollution prevention, the WDNR and NEC agree to the following increased flexibility, variances and or approvals, as part of this agreement and pursuant to s. 299.80 (4), Wis. Statutes.

Please refer to PART I A. (Appendix C) Specific Permit Conditions under the Cooperative Environmental Agreement

**1. Volatile Organic Compound Emissions**

- a. Limitations:
- b. Compliance Demonstration Methods:
- c. Record Keeping and Monitoring Requirements:
- d. Reference Test Methods:

**2. Hazardous Air Pollutant Emissions**

- a. Limitations:
- b. Compliance Demonstration Methods:
- d. Reference Test Methods:

**3. Particulate Matter Emissions**

- a. Limitations:
- b. Compliance Demonstration Methods:
- c. Record Keeping and Monitoring Requirements:
- d. Reference Test Methods:

**4. Visible Emissions**

- a. Limitations:



- b. Compliance Demonstration Methods:
  - c. Record Keeping and Monitoring Requirements:
  - d. Reference Test Methods:
5. Operational Flexibility
- a. New Equipment Construction and Modification:
6. Facility Wide Reporting Requirements
7. Compliance Testing Requirements

---

## **XII. BASE LINE PERFORMANCE EVALUATION AND REPORTING OBLIGATIONS**

Within 180 days of the signing of this Agreement, NEC shall perform a base line performance evaluation utilizing its current environmental management system program. The report will be submitted annually thereafter on April 15 of each year or on another date agreed upon by NEC and the WDNR. This initial performance evaluation shall be performed on the two facilities currently named in this agreement and is to include any future facilities included, as amendment, in this agreement thereafter the agreement is signed. This evaluation will establish a facility environmental baseline, which recognizes and provides credit for NEC activities performed since 1996 (Date of EMS implementation for Sparta), which resulted in minimizing impacts on the environment.

This report shall be shared with the WDNR and the interested persons group. A copy will be made available for public inspection at NEC offices and the public libraries nearest to the community of the facilities involved agreement and, at a minimum, will contain the following:

### **1. Regarding the Interested Persons Group:**

- a. Changes in the composition of the interested persons group;
- b. Summary of assistance and information provided to the interested persons group;
- c. Summary of meetings with the interested persons group, including dates, attendance lists, topics addressed, and comments received; and
- d. Results of any action or changes in response to input and feedback from the Interested Persons Group.

### **2. Regarding Commitments to Superior Environmental Performance**

- a. Progress on the implementation of environmental information management system for the Holmen facility;
- b. The previous years Environmental Objectives and Targets;
- c. Progress made toward the previous years Environmental Objectives and Targets;

- d. Current Environmental Objectives and Targets;
- e. Examples of programs/activities that resulted in waste, energy usage, and/or emissions reductions;
- f. Summary of facility air emissions and waste generation, as reported in the Annual Emissions Inventory and Hazardous Waste Report;
- g. Documentation of changes in citizen environmental complaints and satisfaction of complainant that concern has been addressed; and
- h. Documentation of changes in the status of NEC's environmental compliance.

**3. Regarding Operational Flexibility:**

- a. Time (days/weeks from submittal to completion) saved in obtaining permits;
- b. Time saved (hours per month) by the reduction in recordkeeping requirements and administrative requirements;
- c. Description of the changes in the time required by NEC to manage its air/air permit program;
- d. Energy savings from avoiding the use of the incinerator.

**4. Regarding Overall Assessment of the Success of the Agreement:**

- a. Public recognition/awards resulting from the efforts of the Cooperative Agreement and EMS;
- b. A summary of the annual achievements, difficulties or other challenges associated with fulfilling the agreement;
- c. An analysis of the suspected reasons for the above mentioned achievements and difficulties or other challenges associated with fulfilling the agreement; and
- d. A summary of the activities undertaken to improve the performance of the Agreement.

NEC will provide all information in the form of a single report that includes the above (Part XII) and the reporting requirements of Part I. A. of the Specific Permit Conditions.

NEC and the WDNR agree to meet annually to review the results of this agreement. At a minimum this meeting will include a review of the benefits for both parties, the roadblocks that were encountered, and the means to improve this process.

**Interim 6 month Report:**

NEC shall submit a report summarizing the actual, facility wide volatile organic compound and hazardous air pollutant missions for each consecutive 12-month period every 6 months. The period addressed by the report

shall be the 6 month period starting on the date the Cooperative Agreement is signed or other date agreed upon and approved by DNR, U.S. EPA, and NEC, and each subsequent 6 month period thereafter. A copy of this report shall be submitted to the DNR and U.S. EPA within twenty days following the end of the reporting period. If the report shows the actual facility wide volatile organic compound or hazardous air pollutant emissions have exceeded 50 percent of the allowable limitations outlined in the operation permit, the permittee shall provide an explanation why emissions reached the levels that they did and how they intend to ensure emissions will not exceed the allowable limitations over the course of the next 6 month period.

---

### **XIII. REPORTING OF VIOLATION**

Any violations discovered as part of the baseline or annual environmental performance evaluation shall be disclosed to WDNR within 45 days of the completion of the evaluation in a report containing the information required under s. 299.80(12), Wis. Stats. WDNR may not take any civil enforcement action on any such reported violations if they are corrected within 90 days of notification, unless the violations present an imminent threat to public health or the environment or may cause serious harm to public health or the environment, or the department discovers the violations before the Company discloses them. This does not exempt the NEC from the requirements for immediate notification contained in s. 292.11, Wis. Stats. or any other provisions of any criminal violations would always be subject to WDNR enforcement action.

If a longer period of time is needed to correct the violations, a compliance schedule can be negotiated and the agreement modified allowing a compliance schedule of up to 12 months.

#### **a. ENFORCEMENT DEFERRAL.**

WDNR agrees not to commence a civil action to collect forfeitures for violation at NEC facilities covered by this Agreement if those violations are disclosed in a report that meets the requirements of Section XII of this Agreement for at least 90 days after WDNR receives the report. So long as NEC corrects the violations that are disclosed in such a report within 90 days after WDNR receives the report, WDNR shall not commence a civil action to collect forfeitures for said violations.

If NEC submits a report to WDNR disclosing a violation and a proposed compliance schedule, WDNR may approve the compliance schedule as submitted or propose a different compliance schedule. If NEC and WDNR agree upon a compliance schedule, that schedule shall be incorporated into this Agreement without formal amendment.

Notwithstanding anything else in this Agreement, WDNR may commence a civil action at any time to collect forfeitures for violations which: (1) present an imminent threat to public health or the environment or may cause serious harm to public health or the environment; or (2) WDNR discovers the violations before NEC submits a report disclosing such violations.

#### **b. AMENDMENT OR REVOCATION OF AGREEMENT. CONFIDENTIAL INFORMATION.**

Notwithstanding any other provision in this Agreement, included but not necessarily limited to Sections XII, XIII, XIV and XV, WDNR will take all steps to protect NEC's confidential business information to the maximum extent provided by law. In this regard, NEC will designate confidential business information pursuant to Wis. Admin. Code § NR 2.19; Wis. Stat. §§ 285.70, 291.15, 289.09, 101.598, 134.90(5) and



905.08; and any other common law or statute providing for protection of confidential information. This Agreement shall not constitute a waiver by NEC of any such privilege that it currently or may hold over confidential business information, trade secrets or other privileged communications.

---

#### **XIV. APPLICABLE LAW.**

The laws of the State of Wisconsin shall govern this Agreement. Furthermore, the rights, obligations and liabilities of the signatories to this Agreement shall be determined under principals of general contract law.

---

#### **XV. FACILITY LIAISON AND ADDRESSES**

NEC and WDNR shall each appoint a representative from their respective organizations to serve as a liaison under this Agreement. All correspondence and communications between the parties shall be directed to the then designated liaisons.

The WDNR liaison shall have an intimate knowledge of NEC operations as well as a working familiarity with the coating industry and those activities associated with coating operations that have the potential to affect the environment. The WDNR liaison shall also have working knowledge of non-environmental regulatory matters that affect the coating industry or manufacturing businesses in general.

The current liaisons for NEC and the WDNR are listed below. Changes in each organization's liaison or their associated addresses shall be forwarded to the other party once effective and will become part of this Agreement without formal amendment.

Mark Harings  
Environmental Assistance Coordinator  
Wisconsin Department of Natural Resources  
1300 W. Clairemont Avenue  
Eau Claire, WI 54702-4001  
(715) 831-3263

Randy Nedrelo  
Solid and Hazardous Waste Manager  
Northern Engraving Corporation  
803 S. Black River Street  
Sparta, WI 54656  
(608) 269-6911

Department of Natural Resources

Home | Search | Feedback | What's New

RECEIVED

NOV 12 2002

AIR PROGRAMS  
BRANCH

NEC Cooperative Environmental Agreement 6/6/02

## Appendix C.3: Specific Permit Conditions under the Environmental Cooperative Agreement for NEC's Sparta facility

### Preamble

An Asterisk "\*" throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

### Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 642025010-F01

**Revised Construction Permits Issued in Conjunction with Permit 642025010-F01 under s. NR 406.11, Wis. Adm. Code:** 97-JCH-130, 97-JCH-107, 95-MM-617, 93-IRS-040, 92-POY-157, 92-POY-068, 91-POY-136, 91-POY-088, 90-IRS-135, 87-IRS-081, 87-MJT-033, and 86-RV-049

**Revised Operation Permits Issued in Conjunction with Permit 642025010-F01 under ss. NR 407.11, 407.12, 407.13 and/or 407.14, Wis. Adm. Code:** EOP-10-KJC-83-32-077A, 642025010-N01, and EOP-10-KJC-83-42-077

### Stack and Process Index

- Stack S02, Boiler B02 - Natural Gas/Propane Space Heaters with a Total Rating of 37.1 mmBtu/hr - Installed 1994
- Stack S12, Boiler B22 - Natural Gas/Propane Boiler Rated at 8.4 mmBtu/hr - Installed 1961
- Stack S13, Boiler B23 - Natural Gas/Propane Boiler Rated at 10.6 mmBtu/hr - Installed 1971
- Stack S14, Boiler B24 - Natural Gas/Propane Boiler Rated at 10.6 mmBtu/hr - Installed 1971
- Stack S15, Boiler B25 - Natural Gas/Propane Boiler Rated at 6.3 mmBtu/hr - Installed 1961
- Stack S03, Process P03 - 5 Lithographic Lines with UV Curing - Installed 1988
- Stack S18, Process P32 - 3 Roll Coating Machines, Each with a 8.0 mmBtu per hour Natural Gas/Propane Curing Oven - Controlled by Thermal Oxidizer C18 (P32-1S Installed 1984; P32-10S Installed 1989; P32-87S Installed 1993)
- Stack S19, Process P33 - 2 Metal Spray Booths, With a 6.4 mmBtu per hour Natural Gas/Propane Curing Oven - Controlled by Paper Paint Filters (C18) and a Thermal Oxidizer C19 - (P-33-18S-1B and P-33-18S-2B) - Installed 1993
- Stack S53, Process P37 - 3 Screening Lines - 2 with Natural Gas/Propane Curing, 1 with UV Curing -



(P-37-12S; P-43-SOS; P-71-SOS)

- Stack S41, Process P41 - Two Litho Pressess with Two UV Ovens - Installed 2001
- Stack S43, Process P43 - Three Screening Machines with Two Electric Drying Ovens - Installed 2001
- Stack S42, Process P42 - Two Roll Coaters with Two Electric Drying Ovens - Utilized for R&D Activities - Installed 2001
- Stack S44, Process P44 - Spraybooth - Utilized for R&D Activities - Installed 2001
- Stack S56, Process P56 - Roll Coating Line with Electric Curing Oven - Installed 1993
- Stack S57, Process P57 - Plastic Spray Booth with (this booth uses same curing oven used for P33) - (P-58-PBS)
- Stack S61, Process P61 - Foil Line Cold Strip Cleaner
- Stack S63, Process P63 - Miscellaneous Facility Wide Cleanup
- Stack S72, Process P72 - Towel Dryer - Installed 1991
- Stack S88, Process P88 - Cleaning, Etching, Nickel Sealing, and Anodizing Tanks - Installed 1994
- Stack S89 and S91, Desmut and Brite Dip Tanks and Brite Dip Hood, Controlled by Scrubbers  
Process P89 - C89 and C91 - Installed 1994

**Permit Shield** Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

**Boilers B22, B23, B24, and B25:** The boilers are not subject to the new source performance standards for fossil fuel steam generators of s. NR 440.19, Wis. Adm. Code because each boiler has a heat input rating less than 250 mmBTU per hour and was installed prior to August 17, 1971. The boilers are not subject to the new source performance standards for industrial-commercial-institutional steam generating unit of s. NR 440.205, Wis. Adm. Code, because each boiler has a heat input rating less than 100 mmBtu per hour and was installed prior to June 19, 1984. The boilers are not subject to the new source performance standards for small industrial-commercial-institutional steam generating units of s. NR 440.207, Wis. Adm. Code because each boiler was installed prior to June 9, 1989.

**Process P03:** Because the facility is not located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha county the requirements of s. NR 422.142, Wis. Adm. Code do not apply to process P03, pursuant to s. NR 422.142(1), Wis. Adm. Code.

Because the maximum theoretical volatile organic compound emissions from each litho line are less than 15 pounds per day, the litho lines are exempt from the requirements of s. NR 424.03(2), Wis. Adm. Code, pursuant to s. NR 424.03(1)(a)4., Wis. Adm. Code.

**Process P61:** Because the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Rock, Sheboygan, Walworth, Washington, Waukesha and Winnebago counties P61 is exempt from the requirements of s. NR 423.03(6)(a)2., Wis. Adm. Code, pursuant to s. NR 423.03(2)(f) 2., Wis. Adm. Code. Because the facility is not located in Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington and Waukesha counties P61 is exempt from the requirements

of s. NR 423.03(6)(a)8. and 9., Wis. Adm. Code, pursuant to s. NR 423.03(2)(f)3., Wis. Adm. Code.

**Process P63:** Because cleanup is performed using a wipe cleaning operation and the facility is located outside of Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Washington or Waukesha counties, it is exempt from the requirements of s. NR 423.03, Wis. Adm. Code, pursuant to s. NR 423.03(2)(g)1., Wis. Adm. Code.

**Facility:** Emissions from firing natural gas and propane, which are group I virgin fossil fuels, in space heaters B02, in boilers B22, B23, B24, and B25, and in the ovens associated with P32, P33, and P37 are exempt from ch. NR 445, Wis. Adm. Code requirements, pursuant to ss. NR 445.04(1)(c)1., (3)(c)1., (4)(c)1., and (4r)(b)1. and ss. NR 445.05(1)(c)1., (3)(c)1., (4)(c)1., and (4r)(b)1., Wis. Adm. Code.

*Part I* The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

*Pollutant* -- This area will note which pollutant is being regulated by the permit.

*Limitations* -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

*Compliance Demonstration* -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance the associated emission limit or work practice standard listed under the corresponding Limitations area. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to insure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a sources is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

*Reference Test Methods, Recordkeeping, and Monitoring Requirements* -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment and frequency of monitoring shall meet, at a minimum, the requirements of ss. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

*Condition Type* -- This column will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

*Conditions* -- Specific conditions usually applicable to the entire facility or compliance requirements.

*Compliance Demonstration* -- This area contains monitoring and testing requirements and

methods to demonstrate compliance with the conditions.

*PART II* -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

### AIR POLLUTION CONTROL OPERATION PERMIT

EI FACILITY NO.  
642025010

PERMIT NO. 642025010-F01

TYPE: Synthetic Minor  
nonPart-70 Source  
Operation Permit  
Revision of Air Pollution  
Control Permits:

97-JCH-130, 97-JCH-107, 95-MM-617, 93-IRS-040, 92-POY-157, 92-  
POY-068, 91-POY-136, 91-POY-088, 90-IRS-135, EOP-10-KJC-83-32-  
077A, 642025010-N01, 87-IRS-081, 87-MJT-033, 86-RV-049, and EOP-  
10-KJC-83-42-077

In compliance with the provisions of Chapter 285 and section 299.80, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Northern Engraving Corporation  
Street Address: 803 S Black River Street  
Sparta, Monroe County, Wisconsin  
Responsible Official, & Title: Bruce Corning, VP Management Systems

is authorized to operate decorated nameplate manufacturing facility in conformity with the conditions herein.

### **THIS OPERATION PERMIT EXPIRES JUNE 10, 2007.**

RENEWAL APPLICATION MUST BE SUBMITTED AT LEAST 12 MONTHS, BUT NOT MORE THAN 18 MONTHS, PRIOR TO THIS EXPIRATION DATE. [s. NR 407.09(1)(b)1., Wis. Adm. Code].

No permittee may continue operation of a source after the operation permit expires, unless the permittee submits a timely and complete application for renewal of the permit [s.285.66(3), Wis. Stats. and NR 407.04(2), Wis. Adm. Code].

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Wisconsin Rapids, Wisconsin, .

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
For the Secretary

By  
Joseph Ancel  
Southeast Team Supervisor



## West Central Region Air Program

**PART I  
SPECIFIC PERMIT CONDITIONS**

***A. Part I.A. of this operation permit is effective so long as the permittee is operating under a Cooperative Agreement with the Department as entered into under s. 299.80 Wis. Stats. If any such Cooperative Agreement expires or is revoked for any reason, Part I.A. of this operation permit is no longer effective and Part I.B. becomes the effective operation permit for the facility. If any such Cooperative Agreement expires or is revoked for any reason, the permittee shall comply with any delayed compliance deadlines and practical interim requirements established by the Department in a written revocation decision until the Department issues the approvals required under chs. 280 to 295, Wis. Stats, that were replaced by the above referenced Cooperative Agreement.***

**1. Volatile Organic Compound Emissions**

**a. Limitations:**

(1) The total volatile organic compound emissions from the facility may not exceed 85 tons for each 12 consecutive month period. [s. 299.80(4)(b), Wis. Stats and s. 285.65(7), Wis. Stats.]

(2) The volatile organic compound emissions from process P42 (Two Roll Coaters with Two Electric Drying Ovens - Utilized for R&D Activities) may not exceed 1666 pounds per month. (Note: This limitation is necessary for this process to be exempt from construction permit requirements.) [s. NR 406.04(1)(g), Wis. Adm. Code]

**b. Compliance Demonstration Methods:**

(1) Each month the permittee shall calculate the total volatile organic compound emissions from the facility as follows:

$$E = (1 \text{ ton}/2000 \text{ lbs}) \times \{[(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n)] - [(S_1 \times P_1) + (S_2 \times P_2) + \dots + (S_m \times P_m)]\}$$

where:

E is the monthly VOC emissions (tons/month);

U is the monthly usage of each ink, coating, solvent, or other VOC containing material used during the month (gallons/month);

W is the density of each ink, coating, solvent, or other VOC containing material used during the month (pounds/gallon)

C is the VOC content of each ink, coating, solvent, or other VOC containing material used during the month expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25);

n identifies each ink, coating, solvent or other VOC containing material used during the month;

S is the amount of each spent ink, coating, solvent or other VOC containing

material recovered and shipped off site each month (gallons/month);  
 P is the VOC content of each spent ink, coating, solvent or other VOC containing material recovered and shipped off site each month in pounds per gallon;  
 m identifies each spent ink, coating, solvent or other VOC containing material recovered and shipped off site during the month.  
 [s. NR 407.09(4)(a)1., Wis. Adm. Code]

**(2)** To demonstrate compliance with condition I.A.1.a.(1), the permittee shall calculate the total volatile organic compound emissions from the facility over each 12 consecutive month period by summing the monthly volatile organic compound emissions as calculated in I.A.1.b.(1) for each consecutive 12 month period. This calculation shall be performed within twenty calendar days of the end of each month for the previous 12 consecutive month period. [s. NR 407.09(4)(a)1., Wis. Adm. Code]

**(3)** The permittee shall use U.S. EPA Method 24, or coating manufacturer's formulation data to determine the VOC content ( $C_n$ ) and the density ( $W_n$ ) of the of the inks, coatings, solvents or other VOC containing materials used. In case of an inconsistency between the Method 24 results and the formulation data, the Method 24 results will govern. [s. NR 439.04(1)(d), Wis. Adm. Code]

**(4)** The permittee shall analyze the spent ink, coating, solvent and other VOC containing material recovered and shipped off site to determine the VOC content (P) no less than: (a) each time there is a substantial change to materials or process operations that may affect the characteristics of the waste stream; or (b) quarterly, which ever is most frequent. [s. NR 439.04(1)(d), Wis. Adm. Code]

**(5)** To demonstrate compliance with condition I.A.1.a.(2) the permittee shall calculate the total monthly volatile organic compound emissions from process P42 as follows: [s. NR 407.09(4)(a)1., Wis. Adm. Code]

$$E_{\text{monthly}} = [(U_1 \times W_1 \times C_1) + (U_2 \times W_2 \times C_2) + \dots + (U_n \times W_n \times C_n) + ]$$

where:

$E_{\text{monthly}}$  is the monthly VOC emissions (pounds/month);

U is the amount of each ink, coating, clean-up solvent, or other VOC containing material used on process P42 during the month (gallons/month);

W is the density of each ink, coating, clean-up solvent, or other VOC containing material used on process P42 during the month (pounds/gallon);

C is the VOC content of each ink, coating, clean-up solvent, or other VOC containing material used on process P42 during the month expressed as a weight fraction (i.e. if a material is 25% VOC by weight C would be 0.25);

n identifies each ink, coating, clean-up solvent or other VOC containing material used on process P42 during the month.

This calculation shall be performed within fifteen calendar days of the end of each calendar month.