REGISTRATION PERMIT FOR PRINTERS

APPLICATION GUIDE

Guide for Assisting Facilities in Applying for Type C Registration Permits

Wisconsin Department of Natural Resources
Air Management Program
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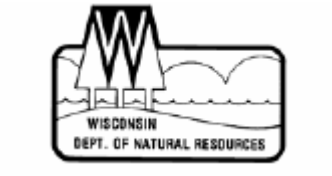

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Registration Permit Application Guide

PART I - Introduction-

This document contains basic information about Registration Permits (ROPs) to help you decide if a Registration Permit is the right type of permit for your facility. The goal of this section is to familiarize you with the steps in the Registration Permit application process, with the differences between a Registration Permit and traditional permits, and with what is expected once your facility is covered under a Registration Permit.

If you think the Registration Permit is right for you, then the next step is to complete the worksheet included at the end of this document. Use of this worksheet will greatly speed your data entry into the online application. Part II of this Guide contains step by step instructions and information to help you complete the worksheet.

Finally, after you've filled out the worksheet and any other supporting documents that you need go to http://dnr.wi.gov/org/aw/air/apii/regpermits.html and click on the link to the online application. Follow the instructions to answer the yes/no questions and fill in the facility information. Finally, print out a hard copy, sign and mail it with any other necessary documents to the Department of Natural Resources Air Management Program as directed in the application. The Department will let you know within 15 days of receipt of the signed copy of your application whether or not you qualify for the Registration Permit. If you qualify, you'll receive an official letter stating that your operations are covered by the Registration Permit and a copy of the Registration Permit.

1. What are Registration Permits?

A Registration Permit, also known as a ROP, could be the last air pollution control permit your facility will ever need. It is a standardized air pollution control operation permit which authorizes facilities with low actual emissions to operate. A ROP places a "cap" on the amount of air pollution your facility is allowed to emit, and includes the methods that must be used to demonstrate that it meets the cap. As long as the facility continues to emit below this cap, it is exempt from all air pollution control construction permitting.

Issued along with the ROP is a companion Registration Construction Permit, RCP. This RCP (not to be confused with the Type B RCP which allows for small construction projects to occur at larger facilities) is nearly identical to the ROP. The RCP ensures a smooth and legal transition from DNR's traditional permit program to the Registration Permit Program. All facilities that apply for coverage under the ROP will also be applying for coverage under the companion RCP. To keep this Guide as simple as possible, the rest of this document refers to the just the Registration Permits. All the same eligibility requirements, compliance requirements, and procedures for obtaining coverage apply to both permits.

2. Pros and Cons of a Registration Permit

A Registration Permit has a number of advantages over a "traditional" operation permit. These advantages include:

- Time-savings:
  - Simplified permit application process
  - Quick Department permit decision – 15 days or less
  - Registration Permits do not expire so never need to be renewed
- Money-savings:
  - No construction permit fees; exempts facilities from construction permitting.
  - No revision or renewal or construction permit applications to fill out
- Flexibility:

- More flexibility in choosing methods for demonstrating compliance
- Annual records are allowed for annual emission caps
- Changes can be made immediately without obtaining a construction permit
- Safe Harbor - Protects facilities that make reasonable efforts to identify and comply with applicable state air pollution regulations from enforcement (See Section 5 for additional details)

A drawback of a Registration Permit is that it does not list all state and federal air pollution regulations that apply to a facility. The Department has developed and will continue to refine and develop tools to assist you in identifying and complying with applicable air pollution regulations, but it may still require significant effort and staff time to identify your applicable requirements and figure out how you will demonstrate compliance with them.

3. How Do You Get a Registration Permit?

Compared to traditional permitting, the process of obtaining a Registration Permit is simple. Only four steps are needed to obtain a Registration Permit:

A. Education – First use the Type C Registration Permit for Printers Application Worksheet (Attachment 2) to review the Registration Permit application questions and determine if your facility is likely to qualify for this Registration Permit. Part II of this Application Guidance document contains additional help on answering those questions. If your facility has non-printing activities, you may not qualify for the Type C Registration Permit but may still be able to obtain coverage under the Type A Registration Permit. The Type A Registration Permit covers all types of facilities with low actual emissions. Go to http://www.dnr.state.wi.us/org/aw/air/apii/regpermits.html to download the Type A Registration Permit fact sheet to see if your facility is qualified for this more general Registration Permit.

B. Revocation – Once you have determined that the Type C Registration Permit for Printers is right for your facility, the next step is to ask the DNR to revoke any old air permits that you have been issued. The Registration Permit is the only permit your facility can have. If you have old permits, you cannot apply for the Registration Permit until the DNR informs you that your old permits are revocable. Use the Revocation Form (Attachment 1) to request that the DNR revoke these old permits. After a quick review for revocability and a 21 day notification period (14 days for construction permits,) DNR will let you know whether your permits are revocable and that you may now apply for a Registration Permit. Your old permits will not actually be revoked until you are officially covered by the Registration Permit.

C. Registration Permit for Printers Application Worksheet – While you await notification that your permits are revocable, you should complete the Registration Permit Application Worksheet (Attachment 2). Facilities that print with heatset web offset presses will need to calculate their particulate matter emissions to see if they have to submit emissions and stack parameters to DNR for air quality modeling see Chapters 7 and 8 for more information on modeling.

D. Once you've been notified by DNR that your old permits are revocable and you have completed the Registration Permit for Printers Application Worksheet you are ready to apply for coverage under the Type C Registration Permit for Printers. Go to http://dnr.wi.gov/org/aw/air/apii/regpermits.html and click on the link to the application. Answer the 8 yes/no questions as you did in your worksheet. Complete the facility information, print, and sign it. *All facilities MUST fill out and submit the Identification of Election for Process Line Specific Alternate Organic Compound Limits* that is attached to the Application Worksheet and some heatset printing facilities or facilities that burn fuel oil, may also need to fill out the Modeling Assessment. Mail the signed application and the required attachments to:

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
BUREAU OF AIR MANAGEMENT

AM/7 – ROP
P.O. BOX 7921
MADISON, WI 53707-7921

Within 15 days of receiving your signed application and the appropriate attachments, the DNR will notify you of its decision on whether or not coverage under the Type C Registration Permit for Printers will be granted to your facility. Following these procedures will automatically ensure your coverage under the Type C RCP (Registration Construction Permit) for Printers as well. See Section 1 for a short explanation on the RCP.

4. How do I transfer coverage from the Type A Registration Permit to the Type C Registration Permit for Printers?

If your facility has already received coverage under the Type A Registration Permit, you can request a transfer of coverage to the Type C Registration Permit for Printers. Use the Transfer of Coverage Request Form available at http://www.dnr.state.wi.us/org/aw/air/apii/regpermits.html, to certify your eligibility for the Type C Registration Permit for Printers, have your responsible official sign it and mail it to the following address:

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
BUREAU OF AIR MANAGEMENT
AM/7 – ROP Attn: Linda Lund
P.O. BOX 7921
MADISON, WI 53707-7921

Your coverage will be transferred within 15 days. You will receive a new coverage letter and a copy of your new Type C Registration Permit. If you have already paid the $1,100 one-time Registration Permit Coverage Fee, you will not be charged again. Your facility should plan to be able to comply with all the requirements of the Type C Registration Permit by your date of coverage under the Type C Registration Permit for Printers.

5. A few words about the on-line application.

The on-line application will time out after 20 minutes of non-use. There is no way to save your responses, or leave the application to investigate an answer and come back later to finish. This is one of the reasons why use of the Application Worksheet has been stressed. Because the worksheet is almost identical to the on-line application, filling out the worksheet first will help you avoid the frustration of having to start the application process from scratch.

Viewing the Review Page of the on-line application works best at resolutions above 800 x 600. The text size controls in your browser can be used to increase of decrease text size in all resolutions so that you can view the entire page.

When printing the on-line application for signature, the document will print on 2 to 4 pages depending on your responses. The page breaks aren't perfect but don't worry about them.

If you do not have access to the internet call Kristin Hart (608)273-5605 to discuss an alternative to submitting the on-line application. Some options are access to the internet through a DNR Service Center or Public Library. If no internet service can be found an application can be generated by phone and mailed or faxed to you for your review and signature and then mailed back to the DNR.

6. Consequences of Being Covered Under the Registration Permit

Facilities should be aware of the consequences of being covered under the Registration Permit:

- Permits and/or orders that were previously issued to the facility must be revoked before you can apply for coverage under the Registration Permit. Specific conditions in these permits will also be revoked and you will be required to instead follow the requirements in the Registration Permit or as listed in the Wisconsin

Administrative Code. An example is LACT. If your facility is subject to s. NR 424.03, Wis. Adm. Code, you may have a LACT determination and requirements in an old permit that are specifically tailored to your facility. When your old permit is revoked, your old LACT determination is revoked as well. Under the Registration Permit, you will be required to either control emissions by 85%, follow the new LACT contained in the Registration Permit or declare your intention to follow an applicable RACT limit in ch. NR 422, Wis. Adm. Code.

- After coverage under the Registration Permit, the facility must continue to meet all applicable air pollution emission limitations and requirements in chapters NR 400 – NR 499, Wis. Adm. Code and all applicable federal requirements, even though they are not listed out in the Registration Permit.
- Facilities are required to monitor and record operational and emissions related data as specified in the Registration Permit and as required to demonstrate compliance with all applicable state and federal air pollution regulations.
- Facilities are required to submit an annual compliance certification and monitoring report that:
    - Certifies compliance with the terms and conditions of the Registration Permit as well as all other applicable state and federal air pollution regulations; and
    - Provides a summary of monitoring conducted at the facility;
- Facilities covered under a Registration Permit must report emissions to the Wisconsin air emissions as required in ch. NR 438, Wis. Adm. Code. Facilities with emissions below reporting thresholds must submit a certified report noting that emissions for the previous calendar year were below reporting thresholds.
- If you utilize pollution control devices such as wall filters or thermal oxidizers, they must meet the control efficiencies listed in the Registration Permit and they must use those efficiencies to calculate their actual emissions for demonstrating compliance with the Registration Permit cap. Or if using higher control efficiencies to calculate annual emissions, stack testing must be performed every 5 years to demonstrate compliance with the alternate control efficiency. If an emission unit is subject to an applicable limitation that specifically requires a different control efficiency, then that control efficiency can be used to calculate actual emissions, but only for the emission unit covered by the limitation.
- Once covered under the Registration Permit you can make changes to the facility without having to obtain a construction permit as long as you continue to meet the terms and conditions and the eligibility requirements for the Registration Permit. If you will not meet a term or condition of the Registration Permit or will become ineligible, you must apply for and receive a traditional permit from the Department *before* you become ineligible for the Registration Permit.
- Heatset web offset printing facilities whose stacks do not meet the stack requirements or whose particulate matter emissions are uncontrolled may have to perform additional air quality modeling before making changes that would increase emissions or decrease the dispersion of air pollution.

7. What is "Safe Harbor"?

The following Safe Harbor provisions only limit the ability of the Wisconsin Department of Natural Resources to take enforcement actions. Under the currently-approved State Implementation Plan (SIP) the USEPA retains the ability to pursue enforcement in cases where the Department could not do so.

Safe harbor is a "grace period" of 90 days for facilities to achieve compliance with an applicable regulation in chs. NR 400-499 that they did not know they were subject to and subsequently violated, or are currently violating. Safe Harbor is available as long as the facility previously made a good faith effort to identify the regulations in chs. NR 400 – 499, that apply to its operations. Safe harbor means that there is no penalty for non-compliance discovered at a facility (i.e., the Department will not take enforcement action), as long as:

- The facility performed and documented a reasonable search and evaluation to identify applicable air pollution regulations and to determine if the facility is meeting those requirements;
- The facility retains documentation demonstrating that the search and evaluation that was conducted was reasonable. This documentation must be kept on site and be available for inspection by Department personnel upon request;
- If the facility subsequently discovers a regulation that applies to it, the facility notifies the Department of the overlooked regulation within 21 days of identifying it; and
- The facility achieves and certifies compliance with the applicable regulation within 90 days after notifying the Department.[1] You can ask the Department to extend the grace period if more time is needed to achieve compliance.

Safe harbor recognizes that air pollution regulations are complex and numerous. With safe harbor, a facility has an incentive to rigorously investigate and follow up on its compliance status and work with the Department to find the best way to meet the obligations and standards in the law.

How do you qualify for safe harbor?

- Operate in compliance with the Registration Permit that the facility is covered under;
- Conduct a *reasonable search and evaluation* initially, and again when emission units are added or modified, when new regulations are published, or when your industry association develops new data :
  - Identify regulations found in chs. NR 400-499, Wis. Adm. Code, that apply to the facility.
  - Determine whether the facility is meeting those regulations.
- Maintain documentation on-site to demonstrate that the search and evaluation that was conducted prior to identifying the applicable regulation was reasonable;
- After this search and evaluation, continue to operate in compliance with the regulations that were identified;
- If non-compliance with a previously unidentified applicable regulation is discovered at some point after the search and evaluation:
  - Submit a written notification to the department within 21 days after identifying non-compliance with an applicable requirement;
  - Certify that the facility is in compliance with the applicable requirement by the appropriate deadline:
    - By default, no later than 90 days after notifying the department; OR
    - If an extended deadline is requested by the permit holder AND granted by the Department, then by the deadline specified by the Department; OR
    - If the Department orders a deadline less than 90 days after notifying the department, then by that deadline.

How do you know and show that your search and evaluation was "reasonable"?

Section NR 407.105(7), Wisconsin Administrative Code, indicates that "a reasonable search and evaluation" includes a search and evaluation of chs. NR 400 to 499, and shall include a reasonable effort to review other readily accessible information relevant to the facility's operations, such as databases, workshops and materials available through trade associations, vendors, the Department of Natural Resources, the Department of Commerce small business clean air assistance program (SBCAAP), the U.S. Environmental Protection Agency and other recognized sources of information on air regulations. In addition, the Department has developed a Registration

[1] The Department has the authority to order the facility to achieve compliance in a shorter time period if the shorter time period is feasible and necessary to protect public health and the environment.

Permit Compliance Guide that is available at the Department's main webpage for registration permits: http://dnr.wi.gov/org/aw/air/apii/regpermits.html. This document contains useful information intended to help facilities identify and understand air pollution regulations that apply to their operations.

Keep a written copy of the results of the search and evaluation at the facility for inspection upon request for as long as the facility is covered under the Registration Permit.

8. Are There Fees Associated With a Registration Permit?

Yes. Facilities that choose to be covered under a Registration Permit are charged an initial fee of $1,100, which is collected from the facility during the next emission inventory cycle. This $1,100 fee replaces the facility's standard emission fees (currently $35.71 per ton of emissions) which would have been charged for that year. For subsequent years, the facility pays the normal emission fees as required under chapter NR 438, Wis. Adm. Code. If you have already paid this fee because your facility is covered by a Type A Registration Permit, you can transfer coverage to the Type C Registration Permit for Printers without incurring an additional $1,100 fee.

9. What are my Options if My Facility is Not Eligible for the Registration Permit?

The purpose of this Guide is to prepare you for answering accurately the Type C Registration Permit for Printers Online Application questions, and to let you know, before using the online application, whether your facility is eligible for the registration operation permit for printers.

The Registration Permit Eligibility determination is NOT a once-denied-always-denied situation. If you find that your facility is not eligible for the Registration Permit at this time you may make operational changes and apply again. For example, if your control equipment does not meet the control requirements in Section G of the Registration Permit, you can improve your control devices and reapply. If your emissions are over the emission cap, you can reformulate a raw material, install control equipment, or make other process changes to reduce emissions and reapply.

Facilities that are primarily printers but also have other types of process lines that emit particulate matter may find that they do not qualify for the Type C Registration Permit for Printers. Such facilities may still be eligible for the more general Type A Registration Permit. The Type A permit's emission caps, modeling requirements, and control device requirements are slightly more restrictive than those of the Type C permit, however, it is available for all types of facilities and businesses. Go to http://dnr.wi.gov/org/aw/air/apii/regpermits.html to review the eligibility requirements for the Type A Registration Permit

PART II - REGISTRATION PERMIT APPLICATION INSTRUCTIONS

1. Facility Classification as a Printer

Question 1:
Is your facility classified primarily as a printer?

ADDITIONAL INFORMATION: *For the purposes of the Type C Registration Permits for Printers, a printer is any facility that identifies a primary Standard Industrial Classification (SIC) Code of 23, 26 or 27 or a primary North American Industry Classification System (NAICS) code of 32311x or 5111x for the operations at their business. Printing should not be an ancillary operation at any business that applies for coverage under the Type C Registration Permits.*

What does this question mean?

The Type C Registration Permit for Printers is only available to facilities that are classified "primarily" as printers. Primary classification is determined by the first two digits of your SIC code or your NAICS code. These codes are the common standards for identifying the industrial sector which best characterizes a facility's products, services, and manufacturing processes. If your facility does some printing but uses a different SIC or NAICS code than those listed above, then you will not qualify for Type C Registration Permit for Printers.

How do I know if I am classified primarily a printer?

The DNR uses the Standard Industrial Classification (SIC) code or the North American Industry Classification System (NAICS) Code to determine if your facility is primarily a printer. For the purposes of the Type C Registration Permits for Printers, a printer is any facility that identifies a primary Standard Industrial Classification (SIC) Code of 23, 26 or 27 or a primary North American Industry Classification System (NAICS) code of 32311x or 5111x for the operations at its business. Printing should not be an ancillary operation at your facility.

How will my status for obtaining the Type C Registration Permit for Printers be affected if I do not classify my facility primarily as a printer?

Your facility will is not eligible for the Type C Registration Permit for Printers. Your facility may qualify for the Type A Registration Permit available for all different types of businesses with low actual emissions. Check your eligibility with the Type A Registration Permit at http://dnr.wi.gov/org/aw/air/apii/regpermits.html.

What if I still need more help determining if my facility is classified primarily as a printer?

- For more help in determining which SIC or NAICS code best describes your facility, consult the following websites: http://www.census.gov/epcd/www/naics.html, http://www.naics.com/search.htm http://www.census.gov/epcd/www/sic.html http://www.osha.gov/pls/imis/sicsearch.html

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Question 1. – Answers and Results:
Is your facility classified primarily as a printer?

- If you answer YES, go on to Question 2.
- If you answer NO, then you are not eligible for the Type C Registration Permits for Printers. You may still qualify for the Type A Registration Permit, which is the general Registration Permit for Facilities with low actual emissions. See the Registration Permit Fact Sheet at http://dnr.wi.gov/org/aw/air/apii/regpermits.html for details.

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2. Existing Orders, Construction, and Operation Permits and Notification That They Can be Revoked

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Question 2:

Is either of the following true?

(a) Your facility does *not* have existing air permits or orders;

(b) Your facility has one or more existing air pollution control construction permits, operation permits, or orders, *and* you have received notification from the DNR indicating that these permits or orders can be revoked to allow your facility to be eligible for a registration operation permit.

ADDITIONAL INFORMATION: *If your facility has any existing air pollution control permits or orders, you must have written notification from the DNR that they can be revoked before you apply for coverage under the Registration Permits. You can request that the DNR revoke these permits and orders by using the Revocation Request form. This form and the Revocation Fact Sheet are available at http://www.dnr.wi.gov/org/aw/air/apii/regpermits.html. More information and forms are available at the end of your Application Guide.*

What does this question mean?

The term 'construction permit' refers to a permit that was issued to a facility to authorize construction or modification of one or more processes that are air emission "sources". The term 'operation permit' refers to a permit that was issued to a facility to authorize the operation of those processes at a facility. The term 'existing permit' refers to the status of the construction or operation permit. Regardless of expiration dates and actions that may have affected an order or permit, an order or permit is considered to be an "existing" one if it has not been formally "revoked" by the Department.

The Registration Permit is the only permit your facility can have. If your facility has any existing construction or operation permits, or orders (e.g. consent orders, administrative decisions, etc.) these permits and orders will be revoked when your facility is covered by the Registration Permit. Upon your request, the Department will review your existing permits to determine if they can be revoked. If they can be revoked, the Department will satisfy the permit revocation notification requirements dictated by State statute, and then notify you that your facility's existing permits and orders can be revoked. After you have received this notification, you may re-start this online Registration Permit application and answer "yes" to this Question.

How do I request that the Department review my permits to determine if they can be revoked?

The Department has developed a simple form request that the Department revocation of your existing permits and orders. This form is available from the Registration Permit website: http://dnr.wi.gov/org/aw/air/apii/regpermits.html

When will my facility's existing permits and orders actually be revoked?

Your facility's existing permits and orders will be formally revoked if and when the Department grants your facility coverage under a Registration Permit. This ensures that your facility maintains the legal requirement to operate with a permit at all times. If you later decide not to apply for the Registration Permit or if it is determined that you do not qualify, your old permits remain in effect.

The department has prepared a Revocation Fact Sheet with more information on revocation. This fact sheet is also available on the Registration Permit website: http://dnr.wi.gov/org/aw/air/apii/regpermits.html.

Table 1 lists some of the common air permit types and permit numbers assigned to them:

Table 1

Permit Type	Example Permit Numbers Assigned
Construction	05-JAJ-154 02-ABC-123-R1 MAN–10-JFH-92-41-083
'ConOp'	05-JAJ-154-OP

Table 1	
Permit Type	**Example Permit Numbers Assigned**
Exemption*	05-JAJ-244 05-JAJ-244-EXM
Order ("Administrative Order")	*Types: Consent orders, Unilateral Orders, Decisions* *AM-98-006*
Operation	678901230-P11 123456780-S01 234567890-F22 998678900-G02 456789010-J01 567890120-N03

*Exemptions do not need to be revoked. They are listed here because the numbering system used for them is identical to that used for construction permits.

What are these permit types, and what do they cover?

- **Construction Permit** is a permit issued to a facility for the construction and initial operation of a new or modified emission source(s) at the facility. A construction permit can be written for an entire new facility, the addition of new sources at an existing facility, or the modification of existing sources at an existing facility. The duration, or life, of a construction permit is typically 18 months from the date of issuance.
- **ConOp Permit** is an operation permit issued to a facility for the continued operation of the new or modified sources previously covered under a corresponding construction permit. A ConOp permit may include the entire facility if the previous construction permit in which this ConOp was written for covered the entire facility. The duration, or life, of a ConOp permit is typically 60 months (5 years) from the date of issuance.
- **Exemption** is an exemption from the requirement to obtain a construction permit for the installation of a new source(s) or the modification of existing source(s). Though numbered like permits, exemptions are not permits and should not be included when determining whether or not you have existing permits.
- **Operation Permit** is a permit issued to a facility for the continued operation of all sources currently in operation at a facility. The duration, or life, of an operation permit is typically 60 months (5 years) from the date of issuance. Note: This type of permit is a facility-wide permit.
- **Administrative Order** is a legal document issued by the Department that differs from a permit and that places binding requirements on a facility that may also become Federally-enforceable by USEPA. An order may be issued in cases such as the following: to approve compliance plans, require the installation of controls, approve a compliance demonstration methods (e.g. internal offsets, in-line averaging), require testing or data collection (e.g. stack test, CEMs), require actions to achieve or maintain compliance (as a formal enforcement action), or to suspend or revoke an operating permit. There are three types of orders. Unilateral orders are initiated and issued by the Department without facility approval and may be appealed by a facility. Consent orders are a binding, voluntary agreement signed by the facility's responsible official. Decisions are unilateral orders that specify the Department's approval of a compliance demonstration method that may have been proposed by the facility.

How can I tell if I have construction or operation permits?

Permits are assigned a specific permit number following the format displayed in the table above. Look for documents at your facility with these numbers or documents with a cover page, entitled: “AIR POLLUTION CONTROL CONSTRUCTION PERMIT”, “AIR POLLUTION CONTROL PERMIT TO CONSTRUCT AND OPERATE”, or “AIR POLLUTION CONTROL OPERATION PERMIT.” The last title “Air Pollution Control Operation Permit” is used for both ConOps and Operation permits.

Some facilities may have received letters exempting construction projects from the need to get a permit. These letters may contain a number similar to a construction permit number. The subject of the letter, or the first paragraph, will clearly identify the letter as an exemption. An exemption is NOT considered a construction permit. Do not include exemption letters when determining if your facility has a permit.

Another way to find out if your facility has been issued a permit is to use the DNR's Facility Permit Search. Permits issued after about 1990 or so are stored on DNR's website. Use the Facility Permit Search is available at http://dnr.wi.gov/cias/apstracking/ Enter your facility's name or FID and click "Start Search."

How will my status for obtaining a Registration Permit be affected if I do have existing construction or operation permit(s) or orders?

If your facility has previously been issued any air pollution construction or operation permits or orders, you must request that the DNR review these permits and/or orders and determine if they can be revoked. If they can be revoked, the DNR will notify you and will begin the process of revoking these permits/orders. This revocation process includes a notification to interested parties and an opportunity to receive comments for 21 days. After the notification period is over, you will receive a determination from the DNR on the revocability of your permits and whether or not you are eligible to apply for the Registration Permit.

How will my status for obtaining a Registration Permit be affected if I do NOT have any existing construction or operation permit(s) or orders?

It will not. You may continue the application process for your facility's coverage under the Registration Permit.

What if I still need more help determining if my facility is currently covered by any construction or operation permit(s)?

- You may contact your facility's assigned compliance engineer for additional help in your determination. A staff directory is available at http://www.dnr.state.wi.us/org/aw/air/STAFF/STAFF.HTM.
- You may also call the Registration Permit Coordinator, Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov for additional help in your determination.

Question 2. – Answers and Results:

Is either of the following true?

(a) Your facility does *not* have existing air permits or orders;

(b) Your facility has one or more existing air pollution control construction permits, operation permits, or orders, *and* you have received notification from the DNR indicating that these permits or orders can be revoked to allow your facility to be eligible for a registration operation permit.

- If you answer YES go on to Question 3.
- If you answer NO, then you may not apply for the Registration Permits at this time. You must first apply for revocation of your existing permits. See the additional information immediately below.

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3. Allowed Emission Units

Question 3:

Are **both** of the following true?

(a) Combustion units at this facility burn only natural gas, propane, or distillate fuel oil with a sulfur content of 0.05% by weight or less.

(b) If particulate matter is emitted at this facility, it is emitted by only heatset web offset printers, fuel combustion units, or insignificant emission units listed in Table 2.

ADDITIONAL INFORMATION: *This permit contains requirements that ensure protection of the ambient air quality standards for particulate matter when emitted from the types of emission units listed in this question. If particulate matter is emitted from any other types of emission units, then the Type C Registration Permits for Printers may not be used to cover the facility.*

What does this question mean?

The question is verifying two eligibility requirements of the Type C Registration Permit for Printers. You must be able to say that both 3.a. and 3.b.are true in order to answer YES to this question and be eligible for the Type C Registration Permit.

Question 3.a. has to do with the types of fuels burned in combustion units. Combustion units are things like drying ovens, air make up units, space heating units and other equipment that operate by burning a fuel. Equipment that runs on electricity is not considered a combustion unit. If your facility does not have any combustion units, then you can say Question 3.a. is true.

The Type C Registration Permit is available only to facilities that burn natural gas, propane or distillate fuel oil with a sulfur content of 0.05% by weight or less. If you use fuel oil, your fuel oil supplier should be able to provide you with information on the sulfur content of the fuel oil they deliver to you. Even if fuel oil is only a back up fuel for your combustion units, you must verify that the fuel oil contains no more than 0.05% sulfur by weight. Most fuel oil available in Wisconsin today will meet this requirement.

If all the combustion units at your facility burn only natural gas, propane or fuel oil that you've verified contains 0.05% sulfur by weight or less, then Question 3.a. is true.

Question 3.b. has to do with equipment at your facility that emits particulate matter. If your facility emits significant amounts of particulate matter from equipment not usually associated with a printing facility, then you will not be eligible for coverage under the Type C Registration Permit. You are allowed to emit particulate matter from heatset web offset printing operations, fuel combustion units as described above, and from the equipment listed in the Table 2 below. You can assume that there are no particulate matter emissions from printing operations other than heatset web offset presses. If the only particulate matter emissions from your facility come from heatset presses, combustion units, or the operations listed in Table 2, then you can say that Question 3.b. is true.

If you *do* have equipment that emits particulate matter other than the allowed equipment described above, you may still qualify for this permit as long as the equipment is not a "significant" source of particulate matter. A significant source of particulate matter is any operation or activity that has maximum controlled emissions of a ton per year or more. To determine if maximum controlled emissions are below 1 ton per year, you should figure out how many pounds of particulate matter could be emitted during the worst case hour of operation considering your control device if you have one, then multiply those emissions by 8760 hours per year and divide your total by 2000 pounds/ton. Equipment that goes through a control device and exhausts back into your building does not need to be counted. You can assume that it is not an emissions point. More information on calculating maximum controlled emissions is available in Section 6 of this guide.

Some examples of activities that emit particulate matter that are NOT typical of printers and are, therefore, not allowed if they could generate a 1 ton of particulate matter per year or more, are welding, grinding and finishing operations, and loading, unloading and mixing of powdered substances.

As long as you are a printer and only emit particulate matter from the operations listed in Table 2 below or other insignificant sources, from heatset web offset presses, or from fuel combustion units, you can answer true to Question 3.b.

Table 2
THE FOLLOWING EMISSION UNITS AND ACTIVITIES ARE CONSIDERED INSIGNIFICANT FOR PURPOSES OF TYPE C REGISTRATION PERMIT FOR PRINTERS

1. Convenience space heating units with heat input capacity of less than 5 million Btu per hour that burn gaseous fuels, liquid fuels or wood
2. Convenience water heating
3. Maintenance of grounds, equipment and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs and cleaning, but not including use of organic compounds as cleanup solvents
4. Boiler, turbine, generator, heating and air conditioning maintenance
5. Pollution control equipment maintenance
6. Internal combustion engines used for warehousing and material transport, forklifts and courier vehicles, front end loaders, graders and trucks, carts and maintenance trucks
7. Fire control equipment
8. Janitorial activities
9. Office activities
10. Fuel oil storage tanks with a capacity of 10,000 gallons or less
11. Stockpiled contaminated soils
12. Demineralization and oxygen scavenging of water for boilers.
13. Purging of natural gas lines.
14. Particulate matter from natural gas combustion in press dryers, control device, and other heating units so long as fuel usage or heat input capacity caps in Attachment 1 are met.
15. Aerosol cans
16. Pad printing
17. Pre-press equipment, such as: photo-processing, typesetting, or image-setting equipment;
18. Proofing systems utilizing water-based, ink jet, dry toner, or dye sublimation or proof press designed to evaluate product quality;
19. Plate-making equipment or screen preparation activities utilizing water-based developing solutions;
20. Equipment used to make blueprints.
21. Cold cleaning manual parts washers with less than 10 square feet of surface area.
22. Dry toner or other digital presses that apply water-based inks.
23. Substrate finishing activities which involve paper folding, cutting, folding, trimming, die cutting, embossing, foil stamping, drilling, saddle stitching, sewing, perfect binding, vacuum forming or other activities that do not generate VOCs and whose particulate emissions are vented inside the facility.
24. Adhesive application activity involving hot melt, extrusion, catalyzed solvent-less, or water-based adhesives.
25. Pneumatic system for collecting paper/film/paperboard scrap from cutting operations.
26. Any emission unit, operation, or activity that has maximum controlled emissions less than one ton of particulate matter per year. Multiple emissions units, operations, or activities that perform identical or similar functions shall be combined for the purposes of this determination.

How will my status for obtaining a Registration Permit be affected if I use a fuel other than natural gas, propane or distillate fuel oil with 0.05% sulfur by weight or less, or if my facility emits particulate matter from units other than heatset web offset printing operations, combustions units or the insignificant sources listed in table 2?

You must be able to say that both 3.a. and 3.b are true to answer Yes to this question. If either 3.a. or 3.b is false then you must answer No and your facility will not be eligible to apply for the Type C Registration Permit. for Printers. However, your facility may be able to qualify for the Type A Registration Permit available for all types of facilities with low actual emissions. Check your eligibility with the Type A Registration Permit at http://dnr.wi.gov/org/aw/air/apii/regpermits.html.

What if I still need more help determining my status as one of these source types?

- You may contact your facility's assigned compliance engineer for additional help in your determination. A staff directory is available at http://www.dnr.state.wi.us/org/aw/air/STAFF/STAFF.HTM.
- You may also contact the Registration Permit Coordinator , Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov, for additional help in your determination.

Question 3. – Answers and Results:

Are **both** of the following true?

(a) Combustion units at this facility burn only natural gas, propane, or distillate fuel oil with a sulfur content of 0.05% by weight or less.

(b) If particulate matter is emitted at this facility, it is emitted by only heatset web offset printers, fuel combustion units, or insignificant emission units listed in Table 2.

- If you answer YES go on to Question 4.
- If you answer NO, then you are not eligible for the Type C Registration Permits for Printers. Check your eligibility for the Type A Registration Permit at http://dnr.wi.gov/org/aw/air/apii/regpermits.html.

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4. Case-by-Case Determinations: NR 445 BACT, LAER, and LACT

Question 4:
Are any of the processes at your facility subject to Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) requirements under ch. NR 445, Wis. Adm. Code?

***ADDITIONAL INFORMATION**: When answering this question you should take into consideration the emission caps in the Type C Registration Permits for Printers.*

What does this question mean?

BACT and LAER refer to special, facility specific regulations affecting facilities that emit known or suspected carcinogens over thresholds listed in ch. NR 445, Wis. Adm. Code. These requirements are considered case-by-case determinations because they require the department to take into consideration the specific circumstances of each facility and process and set an emission limit or work practice standard that may be unique for that facility. If your facility's operation permit must contain BACT or LAER requirements then you are not eligible to be covered by a Registration Permit. This is because the Registration Permit is a generalized permit and cannot contain special requirements for individual facilities.

You may know that LACT or Latest Available Control Techniques required under s. NR 424.03(2)(c), Wis. Adm. Code, is usually a case-by-case determination however, the department has put a generalized LACT into the Registration Permit so that more facilities can qualify for coverage. If your facility is subject to LACT but not subject to any other case-by-case determinations, then you are still eligible for coverage under the Registration Permit.

What are BACT, LAER and LACT?

BACT and LAER for hazardous air pollutants are required under ch. NR 445, Wis. Adm. Code. Effective July 1, 2004, the DNR revised chapter NR 445. The revision adds many new chemicals to the list of hazardous air pollutants, changes the threshold emissions for many chemicals based on the latest health information, provides more stack height ranges with greater emission thresholds, provides a risk-based exclusion option, and discontinues the once-in-always-in policy. Facilities that will emit known or suspected carcinogens above the thresholds specified in Table A of ch. NR 445, Wis. Adm. Code, may be required to have a case-by-case determination of BACT or LAER for their processes to control emissions of these harmful substances. However, you can consider the restrictions on your emissions once you are covered by the Registration Permit when determining if your emission rates will be over the 445 thresholds.

LACT applies to facilities that emit volatile organic compounds and cannot meet the general 85% control requirement. This regulation is found in s. NR 424.03, Wis. Adm. Code. If your processes are not subject to other specific organic compound emission limits found in chs. NR 419, 420, 422,Wis. Adm. Code, you may be required to follow the requirements of a LACT determination. As mentioned above, the Registration Permit contains a generalized LACT that can apply to affected process lines at facilities covered under the Registration Permit.

How can I tell if my facility is subject to a case-by-case BACT or LAER determination?

If your facility has ever had emissions of known or suspected carcinogens in quantities above the thresholds listed in ch. NR 445, Wis. Adm. Code, you may be subject to BACT or LAER. If you already have air permits for processes at your facility, look in those permits for the words BACT or LAER. If you don't have permits or you cannot discern from the permit whether or not you are subject to BACT or LAER, see ftp://commerce.wi.gov/MT-CA-StateHAPrule.pdf for more help in determining whether or not you are subject to a case-by-case determination of BACT or LAER.

What if I used to be subject to a BACT or LAER requirement but now have emissions below the threshold?

If actual emissions of a hazardous substance at your facility are below the new thresholds in ch. NR 445, you can get relief from the BACT or LAER requirements with a Registration Permit, because the revisions to ch. NR 445 discontinued the once-in-always-in policy. As long as the emissions of the pollutants at your facility which have BACT or LAER as control requirements in ch. NR 445 are below the appropriate thresholds listed, you may be eligible for a Registration Permit. In

calculating your emissions, you must look at the conditions in the Registration Permit (i.e., if the emissions are controlled, use the control efficiency in the Registration Permit). In addition, you may choose to do risk modeling to demonstrate that the predicted risk for the pollutant in question is below the allowable risk contained in ch. NR 445.

For facilities with existing construction or operation permits, these old permits will be reviewed to ensure that they can be revoked. The department will not revoke your old permits unless it believes that you will not be subject to BACT or LAER upon coverage of your facility under the registration permit.

How will my status for obtaining a Registration Permit be affected if I already have a permit with a LACT determination?

If your facility already has a permit with a LACT determination under s. NR 424.03(2)(c), Wis. Adm. Code, your facility may still be eligible for coverage under a Registration Permit. Your existing permits will need to be revoked (see the revocation fact sheet on the Department's Registration Permits webpage: http://dnr.wi.gov/org/aw/air/apii/regpermits.html). Your old LACT determination will be revoked along with these old permits. If you choose to move forward with Registration Permit coverage, you will need to meet the requirements of s. NR 424.03 by either controlling organic compound emissions by 85%, or by limiting the emissions from the affected process line to 10 tons organic compounds per year and meeting the generalized LACT contained in the Registration Permit (refer to Section A. of the Type C Registration Permit for Printers). Many printers may elect to meet a specific VOC limit in ch. NR 422 in lieu of 85% control or LACT. If you believe that you can comply with the s. NR 424.03, Wis. Adm. Code, requirements in the Registration Permit you may continue to apply for coverage under the Registration Permit. If instead, you prefer to retain your original LACT or you do not believe you can comply with the LACT in the Registration Permit, you should discontinue the Registration Permit application process and keep your traditional permit.

What if I still need more help determining if my facility is currently covered by any existing construction permit(s)?

- If you cannot find your facility's old permits to see if it is subject to a case-by-case determination, please visit our website at: http://dnr.wi.gov/org/aw/air/permits/APM_toc.htm (If you have any permits that were issued prior to 1990, you may not find them at this website and you can call the Registration Permit Coordinator at the number below).
- You may contact your facility's assigned compliance inspector for additional help in your determination. A staff directory is available at http://www.dnr.state.wi.us/org/aw/air/STAFF/STAFF.HTM.
- You may also contact a Registration Permit Coordinator, Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov, for additional help in your determination.

Question 4. – Answers and Results:

Are any of the processes at your facility subject to Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) requirements under ch. NR 445, Wis. Adm. Code?

- If you answer YES, then you are not eligible for a Registration Permit
- If you answer NO go on to Question 5

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5. Control Efficiencies

Question 5:

Is either of the following true?

(a) Your facility does *not* have air pollution control devices;

(b) All air pollution control devices at your facility meet the minimum control efficiencies listed in Section G of the Type C Registration Permit for Printers.

What does this question mean?

The Registration Permit contains the control devices and the minimum control efficiency levels that control devices at a facility must meet or exceed. These control devices and their required minimum control efficiencies are listed in Table 3 below.

In order to qualify and remain eligible for the Registration Permit, you must first identify all control devices at your facility. Next, identify which devices are required by an applicable emission limitation (a regulation) or are needed to keep facility emissions below the emissions caps (see Section 6).

Finally, you must determine the actual control efficiency for each control device and compare this efficiency to the appropriate minimum control efficiency level that is listed below.

Table 3

Control Device	Control Efficiency (Total Enclosure)[2]			Control Efficiency (Hood)		
	PM	PM_{10} and PHAP	VOC and VHAP	PM	PM_{10} and PHAP	VOC and VHAP
Low efficiency cyclone	40%	20%	-	32%	16%	-
Medium efficiency cyclone	60%	40%	-	48%	32%	-
High efficiency cyclone	80%	60%	-	64%	48%	-
Wall filters (including paint overspray filters and rotary drum filters)	95%	95%	-	76%	76%	-
Fabric filters and HEPA filters (e.g., baghouse, cartridge collectors)	98%	92%	-	78%	73%	-
Thermal oxidizers	-	-	90%	-	-	76%
Catalytic oxidizers	-	-	90%	-	-	76%
Condenser	-	-	70%	-	-	56%
Biofilter	-	-	80%	-	-	64%

What does control efficiency mean?

Control efficiency is a measure of air pollution reduction. It is a percentage value representing the amount of air pollution emission reduction caused by a control device.

How is control efficiency calculated?

A control device's efficiency is defined using the following equation:

[2] VHAP = Volatile hazardous air pollutant, PHAP = Particulate hazardous air pollutant.

$$CE = \frac{[(E_{in}) - (E_{out})]}{(E_{in})} \times 100\%$$

where:

CE = Control device efficiency

E_{in} = Pollutant emission rate entering the control device

E_{out} = Pollutant emission rate exiting the control device

For example, if a pollution control device's efficiency is stated as 90%, that means that for every 10 pounds of an air pollutant entering the device, only 1 pound of the pollutant is emitted to the atmosphere.

How do I determine control efficiency?

You can determine the control efficiency by several means. The most accurate method is through actual performance testing, also called stack testing, of the control device at your facility, where the amount of pollution entering the control device is measured and the amount of pollution being emitted is measured. If performance testing at your facility has never been done, you may use performance test results obtained from testing on similar equipment controlling a similar process at your facility or even at a different facility. Alternatively, you can use control device manufacturer's testing results or guarantees. Control efficiency documentation should be available from the manufacturer of your control device. You will need to have documentation of some sort to meet the compliance demonstration requirements of the Registration Permits.

Note that if you plan to use a higher control efficiencies than those listed in the permit to demonstrate compliance with your emission cap, you will need to make sure stack testing is performed on each control device using an alternate control efficiency at least once every 5 years. Keep records of stack test results on site.

If I use multiple control devices for the same process, how do I determine overall control efficiency?

If more than one control device applies to the same pollutant from a process, there are different ways, depending on the configuration of the control devices, to determine the overall control efficiency.

- If the control devices are in parallel (as shown in figure 1, below), you would simply compare the individual control efficiencies of each device with the required control efficiency in the Registration Permit.
- If the control devices are in series (as shown in figure 2, below), use the following equation to determine the overall efficiency, and compare this efficiency with the required control efficiency in the Registration Permit:

where:

CE1 = Control efficiency of first control device

CE2 = Control efficiency of second control device (if applicable)

CE3 = Control efficiency of third control device (if applicable)

... = Add more control devices into the equation if applicable

Figure 5.1 Control Devices in Parallel

Figure 5.2 Control Devices in Series

What if I still need help in determining how to answer this question?

- You may contact the Registration Permit Coordinator, Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov, for additional help.

Question 5. – Answers and Results:

Is either of the following true?

(a) Your facility does *not* have air pollution control devices;

(b) All air pollution control devices at your facility meet the minimum control efficiencies listed in Section G of the Type C Registration Permit. for Printers

- If you answer YES go on to Question 6.
- If you answer NO, then you are not eligible for the Type C Registration Permits at this time. You may install new control equipment or modify existing control equipment to meet the control device requirements and reapply in the future.

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6. Emission Cap

Question 6:

The Type C Registration Permit for Printers specifies caps for annual, calendar year emissions from your facility. The caps are 50% of the major source thresholds for sec. 112(b) federal hazardous air pollutants, and 25% of major source thresholds for sulfur dioxide, carbon monoxide, VOC, particulate matter, and nitrogen oxides, and a cap on lead emissions of 0.5 tons per year.

Are you willing and able to accept and comply with these caps on your facility's emissions?

***ADDITIONAL INFORMATION**: These limits equate to annual calendar year emissions of 25 tons of PM_{10}, 25 tons of volatile organic compounds, 25 tons of sulfur dioxide, 25 tons of nitrogen oxides, 25 tons of carbon monoxide, 0.5 tons of lead, 5 tons of any single sec. 112(b) federal hazardous air pollutant, and 12.5 tons of the total of all sec. 112(b) federal hazardous air pollutants emitted by the facility.*

What does this question mean?

A Registration Permit effectively caps a facility's actual air pollution emissions. Once you are covered under the Registration Permit, you must limit the annual (calendar year) emissions from your facility to below the caps so that your facility can remain eligible for coverage under the Registration Permit. Table 4 shows the pollutants covered by the Registration Permit emission caps and the highest emissions allowed under each pollutant's cap, according to current (April 2007) major source threshold levels in Wisconsin.

Table 4

Pollutant	Emission Limits[3]
Particulate Matter or PM_{10}	25 ton/year for attainment areas
Volatile Organic Compounds	25 ton/year for attainment, and marginal or moderate ozone nonattainment areas
Nitrogen Oxides	25 ton/year
Sulfur Dioxide	25 ton/year
Carbon Monoxide	25 ton/year
Lead	0.5 tons/year
Section 112(b) Hazardous Air Pollutants (Federal HAP)[4]	5 ton/year for any *single* Federal hazardous air pollutant 12.5 ton/year for *all* Federal hazardous air pollutants combined

What are these pollutants, and where might they be generated at my facility?

- **Particulate matter, or PM,** is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. To be eligible for the Type C Registration Permit for Printers, your facility is only allowed to emit particulate matter from equipment typically found at a printing facility. For the purposes of the Type C Registration Permit, it can

[3] Depending on whether an area of the state meets the air quality standards set by the Environmental Protection Agency, it will be designated as attainment (meets the standards) or non-attainment (does not meet the standards) for a specific pollutant. Most areas in Wisconsin are considered attainment areas. A map showing the location of the current nonattainment areas in Wisconsin is available at http://dnr.wi.gov/org/aw/air/modeling/nonattainment.htm.

[4] A list of these air pollutants is available at http://www.epa.gov/ttn/atw/188polls.html.

be assumed that printing press types other than heatset web offset presses do not emit particulate matter. Allowed particulate matter emission sources from printing facilities include heatset web offset presses, units combusting natural gas, and paper trim. See the Section 3 on Allowed Emissions Units for more information on PM sources at Printers covered by the Type C Registration Permit.

- **PM_{10}** is the portion of particulate matter emitted which has a diameter less than or equal to 10 micrometers. PM_{10} is known to cause more health problems than larger sized particulate matter.
- **Volatile organic compounds, or VOC**, are organic compounds, which in the presence of nitrogen oxides and sunlight, form ground level ozone. The largest sources of volatile organic compounds at printing facilities are from printing inks, blanket washes, fountain solutions, clean-up operations and screen reclaim.
- **Nitrogen oxides, or NOx,** is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are colorless and odorless. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process (e.g., boilers, space heaters, diesel generators, drying ovens.).
- **Sulfur Dioxide, or SO_2,** belongs to the family of sulfur oxide gases (SOx). Sulfur is prevalent in most raw materials, including crude oil, coal, and ore that contains common metals like aluminum, copper, zinc, lead, and iron. SOx gases are formed when fuel containing sulfur, such as fuel oil, is burned in a combustion unit.
- **Carbon Monoxide, or CO**, is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. In combustion processes, the carbon in the fuel is never completely combusted, and a portion becomes CO.
- **Lead** is a metal found naturally in the environment as well as in manufactured products. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Due to the phase out of leaded gasoline, metals processing is the major source of lead emissions to the air today.
- **Section 112(b) Hazardous Air Pollutants, or Federal HAP's**, are a group of 188 pollutants that the Environmental Protection Agency (EPA) have designated as being known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Examples of these pollutants include toluene, xylene, and glycol ethers.

When do I need to calculate my emissions?

The Department recommends that before you apply for a Registration Permit, you calculate your emissions for the previous calendar year and also estimate what you think your emissions for the coming calendar year will be. You should compare these emissions with the Type C Registration Permit emission caps in the table above. Based on your calculations, if you don't believe that you will be able to stay under the Registration Permit emission caps, then this type of permit is not the right permit for you.

When do I need to begin meeting the emission caps in the Registration Permit?

You must be able to demonstrate compliance with the emission caps by the end of the first full calendar year of your coverage under the Registration Permit. For example, if you are granted coverage under the Type C Registration Permit in December 2007, you will need to certify compliance with your 2008 calendar year emissions by March 1, 2009.

Can I consider control devices when I calculate my annual actual emissions?

Yes, as long as the control device is listed in the Registration Permit (see Table 3 under Control Efficiency section of this guide). If you have a control device that is not listed, it may be used only if you have department approved stack testing results from within the last 5 years to verify the control efficiency. Also, if an emission unit at your facility is covered by an applicable requirement that specifically requires a type of control device not listed, you may also use that control device to calculate emissions but only for the emissions covered by the applicable requirement.

What are the control efficiencies that I must use to calculate my facility's emissions?

Any control devices that your facility must use to meet the emission cap of the Registration Permit must meet the minimum control efficiency listed in Table 3 of the previous section. One exception is if an applicable requirement specifically requires a higher control efficiency then you may use that control efficiency in your emission calculations but only for the emission unit subject to the higher control efficiency. You may also use a higher control efficiency if it has been verified by a stack test approved by the department and performed within the last 5 years.

What happens to my emission caps if the attainment area status of the county where I operate changes?

If the attainment status for any pollutant for the area in which your facility is located changes, the emission cap for that pollutant may change. For example, the major source threshold for a moderate nonattainment area for ozone is 100 tons per year of volatile organic compounds (VOC). The threshold for a severe non-attainment area for ozone is 25 tons per year of VOC. So, if the area in which your facility is located is re-designated from moderate ozone nonattainment to severe ozone nonattainment, the VOC emission cap for your facility would drop from 25 tons per year to 6.25 tons per year. If a facility will not be able to meet the emission cap in the permit, it would need to apply for and obtain, a traditional individualized permit from the Department.

As of this writing the attainment status of Wisconsin Counties is not expected to change. However, if it does, the Department would likely have plenty of time to inform affected sources of impending changes in attainment status of a particular county and would help step affected facilities through such a change.

How do I calculate actual annual emissions from my facility?

If you submit an annual Air Emissions Inventory Report also called Consolidated Reporting, to the department, you may use this report to help estimate whether or not your emissions have been and will be below the Registration Permit emission caps. One caution is that the control device efficiencies used in your Inventory Report might be higher than is allowed under the Registration Permit. For example, there is a large difference between the 98% control allowed for PM from baghouses in the Registration Permit and the 99.9% control efficiency given to many baghouses in the air emissions inventory calculations. If you have control devices you may want to recalculate the emissions substituting the Registration Permit control efficiencies for the actual control efficiencies used in your inventory.

If you have never submitted an Air Emissions Inventory Report to the DNR before, or if you have control devices and want to more accurately estimate emissions for Registration Permit purposes, follow the steps below.

- Calculate actual emissions for each pollutant contained in Question 6. from each emission unit[5] at your facility except those listed in Appendix A.
- Similar emission units may be grouped together for emission calculation purposes, if they are uncontrolled or use the same control device or type of type of control device.
- If emissions are controlled by a control device, you must use the control efficiency from the table that corresponds to that type of control device used to control emissions of that pollutant or a control efficiency that you are able to verify through approved DNR stack testing performed every 5 years. Actual annual emissions of all uncontrolled pollutants can be used. Or, if you do not know your actual emissions, you may use the emission limit of an applicable requirement as an estimate of your emissions.
- Use may use actual hours operated during a calendar year, actual production rates for a year or other calendar year data for these calculations. Make sure that you do not anticipate exceeding these calendar year numbers in the future however. For example, if you currently operate one shift per day but would like to increase to two shifts, you might double your actual production numbers to ensure that you will qualify for this permit in years to come.
- Choose one of the calculation methods in a. to d., below, for each emission unit (or group of emission units) at your facility. If you have developed emissions factors or other emissions data specifically for your facility operations using your own stack testing information or material analysis, you may use these emission factors or other data rather than emission factors or other data published by USEPA, MSDS's, or trade associations.
- If an emission unit exhausts particulate matter inside a building, the particulate matter, PM_{10} and other pollutants emitted as particles from that unit do not need to be included in your emission calculations. It can be assumed that these emissions settle out inside the building.
- Once you have calculated the emissions from each emissions unit and each group of similar emissions units at your facility, you must add up the emissions of each pollutant from all emissions units at your facility and make sure that your estimated future annual emissions of each pollutant will not exceed its cap.

[5] An emissions unit is "any part [process equipment, etc.] of a facility which emits or is capable of emitting any air pollutant."

- Once you are covered under the Registration Permit, you will be required to report your actual annual emissions to the Wisconsin Air Emissions Inventory (AEI) and submit an annual certification of compliance with these emission caps.

How do I calculate particulate matter emissions from heatset web offset printing press operations?

The only printing operations at facilities eligible for coverage under this permit that generate significant amounts of particulate matter emissions are heatset web offset presses. A heatset web offset press that has dryer exhaust, will generate particulate matter from the ink oil vaporization.

Ink usage rate, temperature, air flow, vapor pressure of the inks, molecular weight of ink oils, and control status are variables that go into determining how much PM a heatset web offset press emits. The department has developed a spreadsheet titled **WI_HeatsetPMCalcs.xls** which you can use to calculate corresponding ink usage rates from particulate matter emissions based on ink oil properties and air flow for both controlled and uncontrolled heatset web offset presses. This excel spreadsheet can be found at http://dnr.wi.gov/org/aw/air/apii/regpermits.html under Compliance Assistance Documents.

What are some other methods for calculating emissions from my facility?

a. Use approved Emission factors. Emission calculation can be based on the source's actual operating parameters, as shown in the following equation and a published emission factor. The most common emissions factors are found un USEPA's AP-42 but other emission factors developed by a credible source, or developed through your own stack testing may be used.

   E = OP x U_{EF} x [1-CE], where

   E = Actual emissions in tons per year

   OP = Operating Parameter as required by the emission factor (e.g., actual hours of operation or number of units produced or gallons of fuel used).

   U_{EF} = Emission Factor[6] (e.g., pounds of pollutant per hour of operation or number of units produced, or gallons of fuel used)

   CE = Control Device Efficiency (percent expressed as a decimal fraction) as listed in the Registration Permit. No other control device efficiency may be used for CE unless a higher control efficiency is specifically required by an applicable requirement that the emission unit is subject to or department approved stack test results from within 5 years can verify a higher control efficiency. If no control device is installed for an emission unit or if the control device is not designed to control a given pollutant, then CE = 0.

b. A material balance may be used to calculate actual VOC emissions:

   E = [(ax - y - cz) x (1 - d)]/2000 lb/ton, where

   E = the emissions of VOC in tons per year

   a = the amount of material entering the process in a calendar year. This is typically gallons of ink or pounds of adhesive.

   x = the amount of VOC contained in the material. This is sometimes given as a percent by weight or may be given in lb/gallon. Be sure you have documentation of the VOC content in each material using a signed statement from the supplier, results from an approved test method, or the material safety data sheet (MSDS).

   y = the amount of VOC incorporated permanently into the product. This includes VOC's chemically transformed in production. It does not include latent VOC remaining in the product that will at some time be released to the atmosphere.

[6] An "emission factor" is a representative value that relates the amount of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. These factors are usually expressed as the weight of pollutant divided by a unit weight, volume, distance, or duration of the activity emitting the pollutant (e.g., pounds of particulate emitted per ton of coal burned). The best emission factors to use are ones developed at your facility using approved test methods and your own material throughput. If emission testing has not been done at your facility, you can find emission factors for many types of emission sources using the USEPA document AP-42 available at the following site: http://www.epa.gov/ttn/chief/ap42/index.html. Trade associations and equipment manufacturers also publish emission factors suitable for estimating emissions

c = The amount of material, if any, leaving the process as waste in a calendar year. This might be unused ink left in the bottom of the pot, or spent cleaning solvent to be shipped off as hazardous waste.

z = the amount of VOC contained in the material, if any, leaving the process as waste, or otherwise not incorporated into the product and not emitted to the air.

d = the control device efficiency (percent expressed as a decimal fraction of 1.0), as listed in the Registration Permit (see discussion above for Question #7). If there is no control device, d=0.

c. Allowable Emissions method. Another way to calculate your actual annual emissions is to use the applicable emission limitation for your emission unit and scale up to account for annual emissions. This method may over estimate your emissions, but is simpler and may prevent you from under estimating future emissions.

For example, if you use 10 different printing inks you could calculate emissions using the VOC content of each ink from its MSDS's and multiplying by the number of gallons of each ink you used for the year. This is, in fact, how you will calculate actual annual emissions to report to the emission inventory. But, if you have 50 or 60 inks, this can become labor intensive and may not give you an accurate picture of how high your emissions might go in a given year.

As a screening tool to see if you will qualify for the Type C Registration Permit, you can instead us the highest VOC content that the regulation allows. For example, let's say your facility is a screen printer and you have an applicable limit on screen printing inks that limits VOC content to 3.3 lb VOC per gallon of ink used. Since this is the highest VOC content that your inks can have, you can simply use this VOC content and multiply by the total gallons of inks used in a good calendar year to give you an estimate of VOC ink emissions.

d. Mass balance can also be used for substances other than VOC. You may determine sulfur dioxide emissions by measuring the sulfur content of the fuel used and assuming that all of the sulfur in the fuel is oxidized to sulfur dioxide. The sulfur content of each batch of fuel received must be measured by an independent laboratory using ASTM methods or verified by vendor certification. The sulfur dioxide actual emissions must be determined for each batch of fuel received by using the following equation:

SO_2 = %S/100 x F/2,000 x 2

where,

SO_2 = Tons of sulfur dioxide emissions from a given batch of fuel.

%S = Weight percent sulfur in the fuel being burned.

F = Amount of fuel in a given batch, in pounds.

2,000 = Pounds per ton.

2 = 2/1 = 64/32 = Pounds of sulfur dioxide per pound of sulfur in one pound-mole.

The total sulfur dioxide emissions for the year equals the sum of the sulfur dioxide emissions from all individual fuel batches burned during the calendar year.

NOTE: The Registration Permit Compliance Guide will provide additional calculation methods with alternate compliance options for the Registration Permit caps on each pollutant's emissions. See http://dnr.wi.gov/org/aw/air/apii/regpermits.html

What if I still need more help calculating my emissions?

- Wisconsin's Department of Commerce operates the Small Business Clean Air Assistance Program (SBCAAP). This program employs several clean air specialists who can assist small businesses in calculating their emissions. SBCAAP's web site is located at http://www.commerce.state.wi.us/BD/BD-CA-sbcaap.html. The site contains additional information on the program as well as contact information.
- The Department, in cooperation with the Department of Commerce's Small Business Clean Air Assistance Program, developed an Air Pollution Emission Calculation Spreadsheet to help facilities calculate their emissions. This spreadsheet is available at: ftp://commerce.wi.gov/MT-CA-EmissionsWorksheet.xls.

- If you are unsure what emission factor to use for an emission unit at your facility, USEPA maintains a document titled **AP-42, Compilation of Air Pollution Emission Factors** which contains representative emission factors for a variety of industrial categories and processes. This document is available on-line at http://www.epa.gov/ttn/chief/ap42/index.html
- You may also contact the Registration Permit Coordinator, Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov, for additional help in figuring out how to calculate emissions.

Example Calculation

Shown below is an example emission calculation for a combustion process. Note that no control device is present, so CE = d = 0:

– **Combustion source**

Emissions Unit: 90 million BTU per hour boiler (90 MMBTU/hr)

Fuel: Natural gas

Heat content: 1,000 MMBTU/million cubic feet of nat. gas (1,000 MMBTU/cf6)

Back up Fuel: #2 Fuel oil

Heat content: 140 MMBTU/1,000 gallons of #2 fuel oil (140 MMBTU/Mgal)

Particulate matter (PM) is calculated as follows:

Natural gas:

The emission factor is from AP-42, Chapter 1, Section 1.4, for boilers. Total particulate matter is the sum of the filterable and condensable particulate matter.

PM: (5.7 + 1.9)lb/cf6 X 90 MMBTU/hr X cf6/1,000 MMBTU = 0.684 lb/hr

PM: 0.684 lb/hr X 8,760 hr/yr X ton/2,000 lb = 3.00 ton per year (3.00 TPY)

#2 Fuel oil:

The emission factor is from AP-42, Chapter 1, Section 1.3, for Industrial boilers of <100 MMBTU/hr, distillate oil fired. No emission factor is included for condensable particulate matter; the listed emission factor will be assumed to be a reasonable estimate for total particulate matter emissions.

PM: 2 lb/1,000 gal X 90 MMBTU/hr X 1,000 gal/140 MMBTU = 1.29 lb/hr

PM: 1.29 lb/hr X 8,760 hr/yr X ton/2,000 lb = 5.63 TPY

Of course, during a given calendar year a facility might use both fuels in the same unit at different times, so the total actual PM emissions for the year would be determined by taking into account the amount of each fuel actually burned in the unit during the year.

Question 6. – Answers and Results:

The Type C Registration Permits for Printers specifies caps for annual, calendar year emissions from your facility. The caps are 50% of the major source thresholds for sec. 112(b) federal hazardous air pollutants, and 25% of major source thresholds for sulfur dioxide, carbon monoxide, VOC, particulate matter, and nitrogen oxides; the cap on lead emissions is 0.5 tons per year.

Are you willing and able to accept and comply with these caps on your facility's emissions?

- If you answer YES go on to Question 7.
- If you answer NO, then you are not eligible for the Type C Registration Permits for Printers at this time. You may install control devices, change raw materials, and/or modify equipment to reduce emissions to below these thresholds and reapply in the future.

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7. Allowed Stack Configurations and Air Quality Modeling

Question 7:

Is either of the following true?

(a) The facility does not contain any heatset web offset presses or distillate fuel oil fired combustion units;

(b) All of the stacks at your facility that vent emissions from distillate fuel oil fired combustion units and/or heatset web offset presses meet *both* of the following requirements (Don't include those stacks for presses or combustion units that would be considered insignificant as listed in Attachment 3 (which follows at the end of this worksheet)):

1. The stacks have an unobstructed discharge within 10 degrees of vertical. *Valves designed to open and close at the point of discharge are considered to be unobstructed if they are open at the time of emission; and*
2. The stacks are taller than any building that influences the dispersion of emissions from the stack. A building is considered to influence the dispersion of emissions from any stack that exists within a distance from the building of 5 times the building height.

ADDITIONAL INFORMATION: *To be eligible for the Type C Registration Permits for Printers, all of your facility's stacks that vent heatset web off set presses and combustion units must meet these requirements, OR alternatively, you can perform an air quality modeling analysis for your facility to demonstrate that, with your facility's current stack configuration, your emissions will not result in a violation of any air quality standard.*

What does this question mean?

The Type C Registration Permit for Printers stack requirements apply only to stacks venting emissions from heatset web offset presses and from stacks venting combustion units that use distillate fuel oil. So, if you are not a heatset printing facility and if you do not use distillate fuel oil, then 7.a. is true and you can answer YES to this question. You do not need to even look at your stacks to try to figure out if they meet the requirements. You can go on to Question 8.

If you do print with heatset web offset presses or, if you use distillate fuel oil, even as a backup fuel, then you'll need to investigate further. Question 7.b. says that the stack requirements don't apply to insignificant emission units. So your next step is to figure out if the combustion units and heatset presses you have are insignificant or not. An emission unit is insignificant if its maximum theoretical emissions of each pollutant are less than a certain threshold. For heatset presses, the pollutant of concern is particulate matter (VOC emissions cannot be modeled with conventional air quality models so do not need to be included in this determination). If the maximum controlled emissions of PM from a heatset press are less than 1 ton per year, then that press is insignificant and its stack does not need to meet stack requirements. The same goes for distillate fuel oil fired combustion units. If the maximum emissions from a combustion unit are all less than 1 ton per year each, then that combustion unit is insignificant and its stacks do not need to meet the stack requirements. See Section 6 for information on how to calculate emissions from combustion units and particulate matter from heatset presses.

Finally, if your facility has heatset web offset presses with maximum controlled emissions of 1 ton of particulate matter or more or if you have combustion units that use distillate fuel oil and have maximum emissions or 1 ton per year or more of any one of the criteria pollutants, then stacks venting those presses or combustion equipment must meet the following:

- The stacks must be taller than all buildings on which they are located and all buildings that could significantly influence the stacks' emissions as they spread out from their exhaust points into the surrounding area (see example below for how this is determined). A building is considered to influence a stack's emissions if the stack is located within 5 building heights of that building.
- All stacks at the facility must discharge upwards (within 10 degrees of vertical). If a facility has any stacks that do not exhaust within 10 degrees of vertical, the facility does not qualify for the Registration Permit.
- All stacks at the facility must discharge to the atmosphere without alteration of flow due to an obstruction (e.g., rainhat) while the process they serve is operating.

See the Diagram on the Next page

Figure 7.1 Stack heights Relative to Nearby Buildings (Side Perspective-- not to scale)

Figure 7.2 Stack heights Relative to Nearby Buildings (Top View-- not to scale)

In the example depicted in Figures 7.1 and 7.2, all facility stacks and nearby buildings should be individually evaluated in all combinations by determining the nearest point on a given building's perimeter (e.g. Building A) to the stack being evaluated (e.g. Stack A) and then checking whether the distance between that point and the stack is less than five times the building's (e.g. Building A) height (**the "5H-range"**). In this example, only the 30-foot stack at the facility is within the 5H-range of Building A. Since Building A has a height of 35 feet, the height of Stack A would have to be raised to higher than 35 feet, in order to answer YES to Question 7.

To illustrate other possible cases, here are several variations of this example:

- Consider the possibility that Building B was located close enough to the facility that the 50-foot stack was within the 5H-range for Building B. In that case, that stack would have to be raised above 60 feet in order to answer YES to Question 7.
- Consider the case where Building A had a height of 25 feet. In that case, the 30-foot Stack B would be greater than that building's height and, if all other facility stacks meet the 5H-range test for all nearby buildings, then you could answer YES to Question 7.
- Consider the case where Building A was located on the Facility's property and was owned by the facility. Ownership of buildings and whether the locations of buildings are on or off the facility's property are not taken into consideration. In other words, all buildings, whether owned by the facility or not and whether located on the facility's property or not, must be evaluated if they are possibly within the 5H-range for one or more facility stacks.
- There may be buildings all around a facility which require evaluation, rather than just a few along a single street, and in that case their 5H-ranges would also require comparison to the facility's stack locations.
- If there are no buildings in the usual sense, but there are large structures on or off the facility, their heights and proximity to facility stacks must be evaluated if they can be expected to influence the dispersion of emissions from a stack.
- Finally, consider the case where the facility has a stack attached to the side of its own building but that stack is not taller than that building. In this case, the stack height must be raised above the building height, in order to answer YES to Question 7, assuming that no other nearby buildings would require the stack to be raised even higher.

Again, for the Type C Registration Permits for Printers, only stacks venting significant emissions from heatset web offset presses and distillate fuel oil fired combustion units need to meet these requirements.

What if any one of my stacks do not meet the stack requirements?

If any stack venting a significant heatset press or distillate fuel oil fired combustion units at your facility does not meet the stack requirements listed above, you may still be able to qualify for coverage under the Type C Registration Permit. You can use air quality modeling performed previously as part of issuance of an operation permit, or you can perform a computer modeling analysis to determine whether the predicted concentrations of air pollution from your facility meet all the air quality standards. These modeling results must include all stacks venting significant emissions from your facility including those that meet the stack requirements. See the discussion below.

How can I use my old operation permit to determine if my stacks are OK?

If your facility was modeled by DNR for issuance of a facility wide operation permit, you may use those modeling results to show that your facility meets ambient air quality standards as long as the stacks in question were included in the model and the appropriate emission rates were used in the model. If you do not have your modeling results or are unsure if you have had a facility wide model, contact the Registration Permit Coordinator and copies of available results can be forwarded to you.

How can I do my own computer modeling to determine if my stacks are OK?

If you do not have any previous modeling, the SCREEN model is a simple, conservative, model that can be used for this task. If the SCREEN model predicts that any of the pollutant emissions from your facility may exceed an air quality standard, you may choose to perform a more refined modeling analysis using the current USEPA-accepted refined model. The refined model is a complex model that will typically require the help of a trained consultant. The Wisconsin DNR's modeling website is located here: http://www.dnr.wi.gov/org/aw/air/modeling/. Whether you run SCREEN yourself or hire a consultant to run a more refined model, you will need to make sure you use the correct emission rates in the modeling analysis.

Which stacks and pollutants do I need to include in my modeling analysis?

First you need to figure out which emission units and pollutants to include in your modeling analysis. The emission units listed in Appendix A do not need to be included. Also, you do not need to worry about emissions from general building ventilation. The modeling required in this section is only for particulate matter, sulfur dioxide, nitrogen oxide, carbon monoxide, and lead. You do not need to provide results for hazardous air pollutants with your application for coverage under this Registration Permit although you will need to be able to demonstrate compliance with ch. NR 445 when you do your annual certification of compliance with the Registration Permit.

If the maximum controlled facility-wide emissions of particulate matter, sulfur dioxide, nitrogen oxide, or carbon monoxide are less than 5 tons per year, then that *pollutant* is considered insignificant and you do not need to provide modeling results for that pollutant. If the maximum controlled emissions of all pollutants from any single emission unit are each less than 1 ton per year then the *emissions unit* is insignificant. Stacks venting only insignificant emission units do not need to be included in the model. All other stacks do need to be included, even those that meet the stack requirements.

To calculate the maximum controlled annual emissions first calculate the maximum controlled hourly emissions as described below. Then multiply the maximum controlled hourly emissions by 8760 hours per year to get the annual emission rate. If it is not physically possible to operate 8760 hours per year, you are allowed to take into consideration realistic operating scenarios. For example, press down time for changing paper may be considered. If your operation is a batch process that requires a certain amount of down time to change out batches or equipment you may use fewer operating hours per year. Keep a written copy of how you calculated your annual maximum controlled emissions and a justification of the hours per year you used if less than 8760.

How do I calculate the emission rates to use in the model?

The emission rates that must be used in the model are the maximum controlled *hourly* emission rates. To calculate the maximum controlled hourly emissions of air pollutants use the maximum rated capacity of each unit and either emission factors published by USEPA, the equipment manufacturer, trade associations, or emission factors developed from stack testing data at your facility. See Section 6., Emission Cap, for more information on ways to calculate your maximum hourly emissions.

If you use a control device on the emission unit to control emissions of particulate matter, use the control efficiency to reduce the maximum hourly emissions. These are the maximum controlled hourly emissions. Only control devices listed in the Registration Permit or listed in an applicable requirement that the emission unit is subject to may be used in this calculation.

Also, only the control efficiency listed in the Registration Permit for that control device may be used unless a higher control efficiency has been demonstrated through department approved stack testing performed within the last 5 years, or is required in an applicable requirement that the emission unit is subject to. For more information on control devices, see Section 5.

How do I find and then run the SCREEN model?

The SCREEN model is acceptable for use by facilities wishing to model for a Registration Permit. SCREEN allows for a relatively quick analysis of impacts from a facility. You can download the latest version of the SCREEN model from EPA's website here: http://www.epa.gov/scram001/tt22.htm#screen. The WDNR also has created a user friendly guidance document on how to use the SCREEN model, which is available here: http://www.dnr.wi.gov/org/aw/air/modeling/PDF/scr2doc.pdf [PDF format].

How do I use other computer models to determine if my stacks are OK?

If SCREEN model predicts that any of the pollutant emissions from your facility may exceed an air quality standard, you may choose to perform a more refined modeling analysis using current USEPA accepted refined air quality models such as AERMOD. DNR does not provide detailed guidance on how to use these models. You will need either in-house expertise to use them or you can consider hiring a consulting firm to perform the modeling for you. Be sure any consultant you hire understands how to calculate the emission rates to use in the model. Please refer to the discussion above on how to calculate emission rates for use in modeling analyses.

What do I need to do prove that my facility passes modeling?

You will need to click the link in the Registration Permit application to print and fill out Part 1 of the Modeling Assessment Appendix to the Application worksheet and send it in with the signed copy of your Type C Registration Permit for Printers application. You will also need to keep either an electronic or paper copy of the modeling analysis input and output on site and make it available for inspection for the duration of your facility's coverage under the Registration Permit.

What if I still need assistance in answering this question?

- You may contact the Registration Permit Coordinator, Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov, for additional help in determining if your stacks meet the stack requirements of the Registration Permit or for direction on determining how to get an air quality modeling assessment done for your facility.

Question 7. – Answers and Results:

Is either of the following true?

(a) The facility does not contain any heatset web offset presses or distillate fuel oil fired combustion units;
(b) All of the stacks at your facility that vent emissions from distillate fuel oil fired combustion units and/or heatset web offset presses meet *both* of the following requirements (Don't include those stacks for presses or combustion units that would be considered insignificant as listed in Attachment 3 (which follows at the end of this worksheet)):

1. The stacks have an unobstructed discharge within 10 degrees of vertical. *Valves designed to open and close at the point of discharge are considered to be unobstructed if they are open at the time of emission; and*
2. The stacks are taller than any building that influences the dispersion of emissions from the stack. A building is considered to influence the dispersion of emissions from any stack that exists within a distance from the building of 5 times the building height.

- If you answer YES to this question then continue to Question 8.
- If you answer NO, then, you must provide the Department with the results of an air quality modeling assessment that shows your existing stack configurations and maximum emission rates are protective of air quality standards. Fill out the Modeling Assessment Form, which is available at the end of this worksheet. You must complete Part 1 of this form and mail it with your signed application to the Department of Natural Resources Bureau of Air Management. Please proceed to the Online Application (see instructions following Question 8).

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8. Particulate Matter Emissions

Question 8:

Are any of the following true?

(a) The facility does not contain any heatset web offset presses;
(b) All heatset web offset presses at the facility emit less than 0.5 lb/hr particulate emissions from each stack;
(c) Annual maximum controlled emissions of particulate matter from all heatset web offset presses and combustion units at the facility are less than 5 tons per year, excluding emissions from the heatset web offset presses that emit less than 0.5 pounds per hour.

***ADDITIONAL INFORMATION**: An Excel spreadsheet is available to calculate particulate matter emissions from heatset web offset presses. In order to determine if you meet the 0.5 lb/hr particulate matter limit from each stack, go to the Registration Permit Website to download this spreadsheet:* http://dnr.wi.gov/org/aw/air/apii/regpermits.html.

***NOTE:** For the calculation required in this question, you do not need to include insignificant emission units listed in Attachment 3 of this worksheet, nor emissions from stacks serving only as general building ventilation. This is consistent with the definition of annual maximum controlled emissions of particulate matter in the "Important Terms" section of the Type C Registration Permit.*

What does this question mean?

You can answer YES to this question if any of 8.a., 8.b., or 8.c are true. So if you do not print with any heatset web offset presses at your facility, then Question 8.a., is true and you can answer YES to this question. You do not need to do any additional calculations of particulate matter. You've completed the application and you can follow the instruction in Part I for submitting the final application.

If you *do* have heatset presses, calculate the maximum controlled hourly particulate matter emissions using the Excel spreadsheet **WI_HeatsetPMCalcs.xls** available at http://www.dnr.state.wi.us/org/aw/air/apii/regpermits.html under Compliance Assistance Documents. For details on use of this spreadsheet see Section 6. If each of the heatset web offset presses at your facility emit less than 0.5 pounds particulate matter per hour, then 8.b., is true and you can answer YES to this question. You do not need to calculate the total facility particulate matter emissions. You've completed the application and you can follow the instructions in Part I for submitting the final application.

Finally, if you have one or more heatset press that emits over 0.5 pounds per hour particulate matter, then you will need to do additional calculations to figure out if the maximum annual controlled emissions of particulate matter are less than 5 tons per year.

***How do I calculate my Maximum Controlled Emissions of Particulate matter**?*

First you need to figure out which emission units to include in your calculation. Do not include particulate matter emissions from heatset web offset presses that emit less than 0.5 pounds of particulate matter per hour. Also, the emission units listed in Appendix A do not need to be included. Nor should you worry about emissions from general building ventilation, so if you have particulate matter coming off a process line that is vented to the inside of your building, you do not need to try to figure out how much is coming out general building vents. Since you are not eligible for this permit if you have other significant sources of particulate matter, that leaves only emissions from combustion units and heatset web offset presses emitting 0.5 pounds per hour or more to include in your annual emissions calculations.

Second you need to calculate the maximum hourly emissions of particulate matter from these emission units at your facility. This is done by using the maximum rated capacity of your combustion equipment and the maximum hourly capacity of your heatset presses. Use emission factors published by USEPA, the equipment manufacturer, trade associations, or from stack testing data. See Section 6., Emission Cap, for sample calculations. To calculate emissions of particulate matter from heatset web offset printing presses use the Excel spreadsheet **WI_HeatsetPMCalcs.xls** available at http://www.dnr.state.wi.us/org/aw/air/apii/regpermits.html under Compliance Assistance Documents.

Finally, you are ready to calculate the annual maximum controlled emissions. Multiply the maximum controlled hourly emissions from combustion units by 8760 hours per year to get the annual emission rate. You can use a more realistic number of hours per year for press operations due to the down time for paper change out. Keep a written copy of how you calculated your annual maximum controlled emissions and a justification of the hours per year you used if less than 8760.

What do I do if my particulate matter emissions are at or over Question 8 thresholds?

If you have heatset presses and the annual maximum controlled particulate matter emissions from your facility (not including the insignificant emission units and not including any heatset web offset presses that emit less than 0.5 pounds per hour) are greater than or equal to 5 tons per year, then air quality modeling must be performed o particulate matter emissions for your facility. If you meet the Registration Permit stack requirements for all your heatset presses and distillate fuel oil fired combustion units (see Section 7) then the Department will perform modeling for you. Fill out Part 2 of the Modeling Assessment Appendix to the Application Worksheet, available with this document as Attachment 2, complete and submit it with your signed Registration Permit application. The Department will perform air quality modeling and let you know whether or not your facility is eligible to be covered under the Registration Permit within 15 days of receipt of the complete signed application.

Even if your stacks meet the Registration Permit stack requirements, you may prefer to use modeling results from previous modeling performed at your facility if it is available and still accurate. If this is the case, fill out Part 1 of the Modeling Assessment Appendix to the Application Worksheet with the results of the particulate matter modeling and submit the form with the signed hard copy of your Registration Permit Application.

What if I still need help in calculating my maximum controlled emissions of particulate matter?

If you still need assistance in answering this question, you may contact the Registration Permit Coordinator, Kristin Hart at (608) 273-5605, or email at Kristin.Hart@wisconsin.gov, for additional help.

Question 8. – Answers and Results:

Are any of the following true?

(a) The facility does not contain any heatset web offset presses;
(b) All heatset web offset presses at the facility emit less than 0.5 lb/hr particulate emissions from each stack;
(c) Annual maximum controlled emissions of particulate matter from all heatset web offset presses and combustion units at the facility are less than 5 tons per year, excluding emissions from the heatset web offset presses that emit less than 0.5 pounds per hour.

- If you answer YES to this question then you may proceed to the Online Application (see instructions below)
- If you answer NO to this question then an air quality modeling analysis must be completed for your facility. If you were instructed to fill out Part 1 of the Modeling Assessment Form in Question 7, then you have fulfilled this requirement and may proceed to the Online Application. If you were *not* instructed to fill out the Modeling Assessment Form in Question 7, then DNR will do particulate modeling for you. Fill out Part 2 of the Modeling Assessment Form (Attachment 2, following) and mail it with all supporting documents and your signed application to the Department of Natural Resources Bureau of Air Management. Please proceed to the Online Application (see instructions below).

APPENDIX A – EMISSION UNITS AND ACTIVITIES ARE CONSIDERED INSIGNIFICANT FOR PURPOSES OF TYPE C REGISTRATION PERMIT STACK REQUIREMENTS

1. Convenience space heating units with heat input capacity of less than 5 million Btu per hour that burn gaseous fuels, liquid fuels or wood
2. Convenience water heating
3. Maintenance of grounds, equipment and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs and cleaning, but not including use of organic compounds as cleanup solvents
4. Boiler, turbine, generator, heating and air conditioning maintenance
5. Pollution control equipment maintenance
6. Internal combustion engines used for warehousing and material transport, forklifts and courier vehicles, front end loaders, graders and trucks, carts and maintenance trucks
7. Fire control equipment
8. Janitorial activities
9. Office activities
10. Fuel oil storage tanks with a capacity of 10,000 gallons or less
11. Stockpiled contaminated soils
12. Demineralization and oxygen scavenging of water for boilers.
13. Purging of natural gas lines.
14. Particulate matter from natural gas combustion in press dryers, control device, and other heating units so long as fuel usage or heat input capacity caps in Attachment 1 are met.
15. Aerosol cans
16. Pad printing
17. Pre-press equipment, such as: photo-processing, typesetting, or image-setting equipment;
18. Proofing systems utilizing water-based, ink jet, dry toner, or dye sublimation or proof press designed to evaluate product quality;
19. Plate-making equipment or screen preparation activities utilizing water-based developing solutions;
20. Equipment used to make blueprints.
21. Cold cleaning manual parts washers with less than 10 square feet of surface area.
22. Dry toner or other digital presses that apply water-based inks.
23. Substrate finishing activities which involve paper folding, cutting, folding, trimming, die cutting, embossing, foil stamping, drilling, saddle stitching, sewing, perfect binding, vacuum forming or other activities that do not generate VOCs and whose particulate emissions are vented inside the facility.
24. Adhesive application activity involving hot melt, extrusion, catalyzed solvent-less, or water-based adhesives.
25. Pneumatic system for collecting paper/film/paperboard scrap from cutting operations.
26. Any emission unit, operation, or activity that has, for each air contaminant, maximum controlled emissions that are less than the level specified in Table 3 of ch. NR 407, Wis. Adm. Code. Multiple emissions units, operations, or activities that perform identical or similar functions shall be combined for the purposes of this determination.
27. If the maximum controlled emissions of any air contaminants listed in Table 3 of ch. NR 407, Wis. Adm. Code, from all emission units, operations or activities at a facility are less than 5 times the level specified in Table 3, for those air contaminants, any emission unit operation or activity that emits only those air contaminants.

APPENDIX B – Federally Regulated Hazardous Air Pollutants listed in s. 112(b) Clean Air Act

CAS Number	Chemical Name
75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene (including benzene from gasoline)
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis(2-ethylhexyl)phthalate (DEHP)
542881	Bis(chloromethyl)ether
75252	Bromoform
106990	1,3-Butadiene
156627	Calcium cyanamide
105602	Caprolactam
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	o-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene

CAS Number	Chemical Name
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3'-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N-Dimethylaniline)
64675	Diethyl sulfate
119904	3,3'-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3'-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1-Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl sulfate
534521	4,6-Dinitro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1,4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (l-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2-Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)

50000 Formaldehyde
76448 Heptachlor

CAS Number **Chemical Name**

118741 Hexachlorobenzene
87683 Hexachlorobutadiene
77474 Hexachlorocyclopentadiene
67721 Hexachloroethane
822060 Hexamethylene-1,6-diisocyanate
680319 Hexamethylphosphoramide
110543 Hexane
302012 Hydrazine
7647010 Hydrochloric acid
7664393 Hydrogen fluoride (Hydrofluoric acid)
7783064 Hydrogen sulfide
123319 Hydroquinone
78591 Isophorone
58899 Lindane (all isomers)
108316 Maleic anhydride
67561 Methanol
72435 Methoxychlor
74839 Methyl bromide (Bromomethane)
74873 Methyl chloride (Chloromethane)
71556 Methyl chloroform (1,1,1-Trichloroethane)
60344 Methyl hydrazine
74884 Methyl iodide (Iodomethane)
108101 Methyl isobutyl ketone (Hexone)
624839 Methyl isocyanate
80626 Methyl methacrylate
1634044 Methyl tert butyl ether
101144 4,4'-Methylene bis(2-chloroaniline)
75092 Methylene chloride (Dichloromethane)
101688 Methylene diphenyl diisocyanate (MDI)
101779 4,4'-Methylenedianiline
91203 Naphthalene
98953 Nitrobenzene
92933 4-Nitrobiphenyl
100027 4-Nitrophenol
79469 2-Nitropropane
684935 N-Nitroso-N-methylurea
62759 N-Nitrosodimethylamine
59892 N-Nitrosomorpholine
56382 Parathion
82688 Pentachloronitrobenzene (Quintobenzene)
87865 Pentachlorophenol
108952 Phenol
106503 p-Phenylenediamine
75445 Phosgene
7803512 Phosphine

CAS Number **Chemical Name**

7723140 Phosphorus
85449 Phthalic anhydride
1336363 Polychlorinated biphenyls (Aroclors)
1120714 1,3-Propane sultone
57578 beta-Propiolactone
123386 Propionaldehyde
114261 Propoxur (Baygon)
78875 Propylene dichloride (1,2-Dichloropropane)
75569 Propylene oxide
75558 1,2-Propylenimine (2-Methyl aziridine)
91225 Quinoline
106514 Quinone
100425 Styrene
96093 Styrene oxide
1746016 2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345 1,1,2,2-Tetrachloroethane
127184 Tetrachloroethylene (Perchloroethylene)
7550450 Titanium tetrachloride
108883 Toluene
95807 2,4-Toluene diamine
584849 2,4-Toluene diisocyanate
95534 o-Toluidine
8001352 Toxaphene (chlorinated camphene)
1208211,2,4-Trichloroben zene
79005 1,1,2-Trichloroethane
79016 Trichloroethylene
95954 2,4,5-Trichlorophenol
88062 2,4,6-Trichlorophenol
121448 Triethylamine
1582098 Trifluralin
540841 2,2,4-Trimethylpentane
108054 Vinyl acetate
593602 Vinyl bromide
75014 Vinyl chloride
75354 Vinylidene chloride (1,1-Dichloroethylene)
1330207 Xylenes (isomers and mixture)
95476 o-Xylenes
108383 m-Xylenes
106423 p-Xylenes
0 Antimony Compounds
0 Arsenic Compounds (inorganic including arsine)

0 Beryllium Compounds
0 Cadmium Compounds
0 Chromium Compounds
0 Cobalt Compounds
0 Coke Oven Emissions
0 Cyanide Compounds[1]
0 Glycol ethers[2]
0 Lead Compounds
0 Manganese Compounds
0 Mercury Compounds
0 Fine mineral fibers[3]
0 Nickel Compounds
0 Polycylic Organic Matter[4]
0 Radionuclides (including radon)[5]
0 Selenium Compounds

NOTE: For all listings above that contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

[1] X'CN where X = H' or any other group where a formal dissociation may occur. For example KCN or $Ca(CN)_2$

[2] Includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol $R-(OCH2CH2)_n-OR'$ where
n = 1, 2, or 3
R = alkyl or aryl groups
R' = R, H, or groups which, when removed, yield glycol ethers with the structure: $R-(OCH2CH)_n-OH$. Polymers are excluded from the glycol category.

[3] Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[4] Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 ½ C.

[5] A type of atom which spontaneously undergoes radioactive decay.

ATTACHMENT 1 – Revocation Form

State of Wisconsin
Department of Natural Resources
P.O. Box 7921, Madison WI 53707-7921
dnr.wi.gov

Air Pollution Control Permit And Order Revocation Request Form For Sources Seeking Registration Permits

Draft Form 4530-157 (R 06/06)

Notice: *This form is required under ss. NR 406.11(3) and 407.15(4), Wis. Adm. Code. Applicants for Type A Registration Construction and Operation Permits are required to complete a written request for revocation of existing construction and operation permits under ss NR 406.11(3) and 407.15(4), Wis. Adm. Code. Failure to submit complete information as required on this form may be grounds for denial of the request. It is not the Department's intention to use any personally identifiable information from this form for any other purpose. Wisconsin's Open Records law requires the Department to provide this information to others upon request [ss. 19.31 - 19.69, Wis. Stats.]. Read instructions before completing this form.*

This form is for facilities considering coverage under a Registration Permit. If you want to request revocation of your facility's air pollution control permits and/or orders for a reason other than eligibility for a Type A Registration Operation Permit do not use this form. Instead, please submit a written request, by letter, to the address contained on this form, stating the permits and orders you wish to revoke and the reason for the requesting revocation.

1. Facility name and Name

mailing address Street or Route

City, State, Zip Code

2. Facility location Street Address

City, County

3. Parent corporation Name

Street or Route

City, State, Zip Code

Country (if not U.S.)

4. Responsible official Name

Title

Telephone

5. Permit contact person Name

Title

Telephone

Fax

E-mail

6. Facility identification number (FID):

7. List all air pollution control construction and operation permits and orders for which you are requesting revocation. Include the Permit or Order Number and Date Issued. Note that you should list all permits and orders that have been issued to your facility.

8. SIGNATURE OF RESPONSIBLE OFFICIAL	
STATEMENT OF COMPLETENESS I have reviewed this application in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this application are true, accurate and complete. I HEREBY REQUEST REVOCATION OF ALL AIR POLLUTION CONTROL CONSTRUCTION AND OPERATION PERMITS AND ORDERS ISSUED TO THIS FACILITY.	
Printed or Typed Name	Title
Signature	Date Signed

SEND THE ORIGINAL AND ONE COPY OF THIS COMPLETED APPLICATION TO:
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
BUREAU OF AIR MANAGEMENT
AM/7 - ROP
ATTN: Linda Lund
P.O. BOX 7921
MADISON, WI 53707-7921

For Department Use Only
Status: ___Returned to applicant for additional information

___Denied

___Approved
Approval/Denial Date:
Comments:

Form 4530-157

AIR POLLUTION CONTROL CONSTRUCTION AND OPERATION PERMIT AND ORDER REVOCATION APPLICATION FORM INSTRUCTIONS

Please review the Type A Registration Permit eligibility requirements before you complete and submit the form. If you are not eligible for a Type A Registration Operation Permit you should not complete this form.

This application form is used only to request revocation of your facility's air pollution control construction and operation permits and orders. You cannot apply for the Type A Registration Operation Permit unless and until the Department notifies you that your facility's existing air pollution control construction and operation permits and orders are revocable. Go to http://www.dnr.wi.gov/org/aw/air/apii/regpermits.html for more information on how to apply for Registration Permits.

Item 1 Provide full business name and address of corporation, company, association, society, firm, partnership, individual or political subdivision of the state submitting the application.

Item 2 Street address where the air pollution sources are located.

Item 3 If wholly or partly owned by another entity, identify that entity.

Item 4 The responsible official is a person legally responsible for the operation of the permitted air pollution sources. For a corporation, this person must be the president, vice-president, secretary or treasurer, or other person with a similar level of responsibility in the company. Subsection NR 400.02(80e), Wis. Adm. Code defines "responsible official."

Item 5 List the name of the Individual to contact for additional information concerning the permits and/or orders during the revocation process.

Item 6 Provide the facility identification (FID) number that appears on the annual emissions inventory reports.

Item 7 List all air pollution control construction and operation permits and orders that have been issued to your facility. You must request revocation of all of these permits and orders to be eligible to apply for a Registration Permit. Include all air pollution permits and orders including those that have expired, have been extended, have been superseded, or have a renewal pending.

Item 8 Review the form and the certification statement and sign and date. Send the original and one copy of the submittal to the Department and keep a copy for your records.

SEND THE ORIGINAL AND ONE COPY OF THIS COMPLETED APPLICATION TO:
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
BUREAU OF AIR MANAGEMENT
AM/7 – ROP
ATTN: Linda Lund
P.O. BOX 7921
MADISON, WI 53707-7921

ATTACHMENT 2 - Application Worksheet, Process Line Identification, and Modeling Assessment

AIR POLLUTION CONTROL TYPE C REGISTRATION CONSTRUCTION AND OPERATION PERMIT FOR PRINTERS APPLICATION WORKSHEET

FORM # 4530-172 (rev 04/07)

Notice: This Application is for coverage under the Type C Registration Operation Permit for Printers and its companion Type C Registration Construction Permit. These two permits are referred to as the Registration Permits for Printers throughout the rest of this document. Facilities must apply for coverage using application forms, as required under ss. NR 406.17(4)(a), and 407.105(4)(a), Wis. Adm. Code. Failure to submit complete information as required on the form will be grounds for denial of the application. The Department does not plan to use any personally identifiable information from this form for any other purpose, but Wisconsin's open records law does require the Department to provide this information to others upon request [ss. 19.31 - 19.39, Wis. Stats.]

Complete this Worksheet before proceeding to the Registration Permit On-line Application; see the instructions on page 7 if you need help. If you do ***not*** have access to the Internet, call the Registration Permit Coordinator, Kristin Hart, at (608)273-5605 for special instructions on submitting your application.

General Facility Questions

1. Facility name and mailing address	Name	
	Street or Route	
	City, State, Zip Code	
2. Facility location	Street Address	
	□ City, □ Village, □ Town	
	County	
3. Parent corporation	Name	
	Street or Route	
	City, State, Zip Code	
	Country (if not U.S.)	
4. Responsible official	Name	
	Title	
	Telephone	
5. Permit contact person	Name	
	Address	
	City, State, Zip Code	
	Telephone	
	E-mail	

6. Facility NAICS code description:

7. Facility identification number (FID):

8. Briefly describe the facility to be permitted (check all that apply; include an attachment, if necessary):

Printing operations:
- o non-heatset offset lithographic
- o heatset web offset lithographic
- o gravure
- o flexographic
- o screen
- o digital
- o letterpress
- o other: _____

Control device(s):
- o catalytic oxidizer
- o thermal oxidizer
- o biofilter
- o baghouse
- o cyclone/multiclone
- o other _____

Fuels used:
- o natural gas
- o propane
- o distillate fuel oil containing 0.05% sulfur or less by weight.

Other activities (refer to list of insignificant emissions units or activities for examples):
- o _____
- o _____
- o _____
- o _____

Describe location: _____
_____
_____
_____

Eligibility Questions

Answer each of the 8 questions that follow. These questions are identical to those displayed for you during your online application process. More information is provided in the Application Guide available at http://www.dnr.state.wi.us/org/aw/air/apii/regpermits.html.

1. Is your facility classified primarily as a printer? ➢ If you answer YES based on the ***ADDITIONAL INFORMATION*** shown below, go on to question 2. ➢ If you answer NO, then you are not eligible for the Type C Registration Permits for Printers. You may still qualify for the Type A Registration Permit, which is the general Registration Permit for Facilities with low actual emissions. See the Registration Permit Fact Sheet at http://dnr.wi.gov/org/aw/air/apii/regpermits.html for details. ***ADDITIONAL INFORMATION:*** *For the purposes of the Type C Registration Permits for Printers, a printer is any facility that identifies a primary Standard Industrial Classification (SIC) Code of 23, 26 or 27 or a primary North American Industry Classification System (NAICS) code of 32311x or 5111x for the operations at their business. Printing should not be an ancillary operation at any business that applies for coverage under the Type C Registration Permits.*	☐ YES	☐ NO
2. Is either of the following true? **(a)** Your facility does *not* have existing air permits or orders; **(b)** Your facility has one or more existing air pollution control construction permits, operation permits, or orders, *and* you have received notification from the DNR indicating that these permits or orders can be revoked to allow your facility to be eligible for a registration operation permit. ➢ If you answer YES go on to question 3. ➢ If you answer NO, then you may not apply for the Registration Permits for Printers at this time. You must first apply for revocation of your existing permits. See the additional information immediately below. ***ADDITIONAL INFORMATION:*** *If your facility has any existing air pollution control permits or orders, you must have written notification from the DNR that they can be revoked before you apply for the Type C Registration Permits for Printers. You can request that the DNR revoke these permits and orders by using the Revocation Request form. This form and the Revocation Fact Sheet are available at http://www.dnr.wi.gov/org/aw/air/apii/regpermits.html. More information and forms are also available in your Application Guide.*	☐ YES	☐ NO

3. Are **both** of the following true? **(a)** Combustion units at this facility burn only natural gas, propane, or distillate fuel oil with a sulfur content of 0.05% by weight or less. **(b)** If particulate matter is emitted at this facility, it is emitted by only heatset web offset printers, fuel combustion units, or insignificant emission units listed in Attachment 3 (which appears at the end of this worksheet). ➢ If you answer YES go on to question 4. ➢ If you answer NO, then you are not eligible for the Type C Registration Permits for Printers. Check your eligibility for the Type A Registration Permit at http://dnr.wi.gov/org/aw/air/apii/regpermits.html. ***ADDITIONAL INFORMATION:*** *This permit contains requirements that ensure protection of the ambient air quality standards for particulate matter when emitted from the types of emission units listed in this question. If particulate matter is emitted from any other types of emission units, then the Type C Registration Permits for Printers may not be used to cover the facility. Please refer to Allowed Emission Units (Section 3) in the Application Guide if you need more help answering this question.*	☐ YES	☐ NO
4. Are any of the processes at your facility subject to Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) requirements under ch. NR 445, Wis. Adm. Code? ➢ If you answer YES, then you are not eligible for the Type C Registration Permits for Printers. ➢ If you answer NO, go on to question 5 ***ADDITIONAL INFORMATION****: When answering this question you should take into consideration the emission caps in the Type C Registration Permits for Printers. Please refer to Case-by-Case Determinations (NR 445 BACT, LAER, LACT) in Section 4 of the Application Guide if you need more help answering this question.*	☐ YES	☐ NO
5. Is either of the following true? **(a)** Your facility does *not* have air pollution control devices; **(b)** All air pollution control devices at your facility meet the minimum control efficiencies listed in Section G of the Type C Registration Operation Permit for Printers. ➢ If you answer YES go on to question 6. ➢ If you answer NO, then you are not eligible for the Type C Registration Permits for Printers at this time. You may install new control equipment or modify existing control equipment to meet the control device requirements and reapply in the future. ***ADDITIONAL INFORMATION****: The minimum control efficiencies required by Section G of the Type C Registration Operation Permit for Printers are listed in Section 5, Control Efficiencies, of your Application Guide.*	☐ YES	☐ NO

6. The Type C Registration Permits for Printers specifies caps for annual, calendar year emissions from your facility. The caps are 50% of the major source thresholds for sec. 112(b) federal hazardous air pollutants, and 25% of major source thresholds for sulfur dioxide, carbon monoxide, VOC, particulate matter, and nitrogen oxides; the cap on lead emissions is 0.5 tons per year. Are you willing and able to accept and comply with these caps on your facility's emissions? ➢ If you answer YES go on to question 7. ➢ If you answer NO, then you are not eligible for the Type C Registration Permits for Printers at this time. You may install control devices, change raw materials, and/or modify equipment to reduce emissions to below these thresholds and reapply in the future. ***ADDITIONAL INFORMATION****: See Section 6 (Emission Caps) in your Application Guide for more information on calculating actual annual emissions. These limits equate to annual calendar year emissions of 25 tons of PM_{10}, 25 tons of volatile organic compounds, 25 tons of sulfur dioxide, 25 tons of nitrogen oxides, 25 tons of carbon monoxide, 0.5 tons of lead, 5 tons of any single federally regulated hazardous air pollutant, and 12.5 tons of the total of all federally regulated hazardous air pollutants emitted by the facility.*	☐ YES	☐ NO
7. Is either of the following true? **(a)** The facility does not contain any heatset web offset presses or distillate fuel oil fired combustion units; **(b)** All of the stacks at your facility that vent emissions from distillate fuel oil fired combustion units and/or heatset web offset presses meet *both* of the following requirements (Don't include those stacks for presses or combustion units that would be considered insignificant as listed in Attachment 3 (which follows at the end of this worksheet)): 1. The stacks have an unobstructed discharge within 10 degrees of vertical. *Valves designed to open and close at the point of discharge are considered to be unobstructed if they are open at the time of emission; and* 2. The stacks are taller than any building that influences the dispersion of emissions from the stack. A building is considered to influence the dispersion of emissions from any stack that exists within a distance from the building of 5 times the building height. ➢ If you answer YES to this question then continue to question 8. ➢ If you answer NO, then, you must provide the Department with the results of an air quality modeling assessment that shows your existing stack configurations and maximum emission rates are protective of air quality standards. Fill out the Modeling Assessment Form, which is available at the end of this worksheet. You must complete Part 1 of this form and mail it with your signed application to the Department of Natural Resources Bureau of Air Management. Please proceed to the Online Application (see instructions following question 8). ***ADDITIONAL INFORMATION****: To be eligible for the Type C Registration Permits for Printers, all of your facility's stacks that vent heatset web off set presses and combustion units must meet these requirements, OR alternatively, you can perform an air quality modeling analysis for your facility to demonstrate that, with your facility's current stack configuration, your emissions will not result in a violation of any air quality standard. See Section 7., of your Application Guide for more information.*	☐ YES	☐ NO

8. Are any of the following true? **(a)** The facility does not contain any heatset web offset presses; **(b)** All heatset web offset presses at the facility emit less than 0.5 lb/hr particulate emissions from each stack; **(c)** Annual maximum controlled emissions of particulate matter from all heatset web offset presses and combustion units at the facility are less than 5 tons per year, excluding emissions from the heatset web offset presses that emit less than 0.5 pounds per hour. ➢ If you answer YES to this question then you may proceed to the Online Application (see instructions below) ➢ If you answer NO to this question then an air quality modeling analysis must be completed for your facility. If you were instructed to fill out Part 1 of the Modeling Assessment Form in question 7, then you have fulfilled this requirement and may proceed to the Online Application. If you were *not* instructed to fill out the Modeling Assessment Form in question 7, then DNR will do particulate modeling for you. Fill out Part 2 of the Modeling Assessment Form (Attachment 2, following) and mail it with all supporting documents and your signed application to the Department of Natural Resources Bureau of Air Management. Please proceed to the Online Application (see instructions below). ***ADDITIONAL INFORMATION**: An Excel spreadsheet is available to calculate particulate matter emissions from heatset web offset presses. In order to determine if you meet the 0.5 lb/hr particulate matter limit from each stack, go to the Registration Permit Website to download this spreadsheet:* http://dnr.wi.gov/org/aw/air/apii/regpermits.html*.* ***NOTE:** For the calculation required in this question, you do not need to include insignificant emission units listed in Attachment 3 of this worksheet, nor emissions from stacks serving only as general building ventilation. This is consistent with the definition of annual maximum controlled emissions of particulate matter in the "Important Terms" section of the Type C Registration Permit. See Particulate Matter (Section 8) in the Application Guide for more information on calculating maximum controlled emission rates.*	☐ YES	☐ NO

Online Application Instructions

1. After you have completed this application worksheet, you are ready to apply for the Registration Permits. If you do not have Internet access, contact the Registration Permit Coordinator, Kristin Hart, at (608)273-5605 for special instructions on submitting your application. All other applicants should go to http://dnr.wi.gov/org/aw/air/apii/regpermits.html and click the link to Registration Permit Applications.

2. After accessing the online application, follow the instructions provided to complete the application process, then print out the final application. The **responsible official** for the facility must sign and date the printed application.

3. Every applicant must fill out and submit ***Attachment 1: Identification of Election for Process Line Specific Alternate Organic Compound Limits***, which follows. If your answers to questions 7 or 8 indicated that air quality modeling is required, you must also fill out and submit ***Attachment 2: Modeling Assessment*** and any other supporting documents required by the modeling form instructions. Keep a copy of the entire package for your files and mail the original ***plus one copy*** to:

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
BUREAU OF AIR MANAGEMENT
Linda Lund - AM/7 - ROP
P.O. BOX 7921
MADISON, WI 53707-7921

Instructions for General Facility Questions

1. Facility Name and mailing address

Provide the full business name and address of corporation, company, association, society, firm, partnership, individual or political subdivision of the state submitting the application.

2. Facility location

Specify the street address; city, town or village; and county where the facility is located. Do not use the mailing address, unless it is the same as the street address. Do not use the address of another location where a management unit or other corporate center is located. Check the appropriate box to indicate whether the location is a city, town, or village.

3. Parent corporation

If the facility is wholly or partly owned by another entity, identify that entity. If the buildings or land are rented, then identify the entity that owns and operates the equipment in the buildings on the site.

4. Responsible official

The responsible official is defined in s. NR 400.02(136), Wis. Adm. Code. "Responsible official" means one of the following:

(a) For a corporation, one of the following:
   1. A president, secretary, treasurer or vice-president of the corporation in charge of a principal business function.
   2. Any other person who performs similar policy or decision-making functions for the corporation.
   3. A duly authorized representative of a person listed in subd. 1. or 2. if the representative is responsible for the overall operation of one or more manufacturing, production or operating facilities applying for or subject to a permit and the representative is approved in advance by the Department.

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(c) For a municipality, or a state, federal or other public agency: either a principal executive officer or ranking elected official. For the purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency, for example, a regional administrator of EPA.

(d) Notwithstanding pars. (a), (b) and (c), for "affected sources" [7], the designated representative.

5. Permit contact person

Identify an individual who can function as the facility's primary contact for the DNR to request additional information concerning the air pollution sources during the permitting process. There are no restrictions on who can be chosen as permit contact person.

6. Facility NAICS code

The North American industry classification system (NAICS) is a common standard for identifying the industrial sector which best characterizes a facility's products, services, and manufacturing processes. The on-line application provides a drop down menu listing the NAICS descriptions available that you must select from. For help in determining your NAICS code and description, consult the following website: http://www.census.gov/epcd/www/naics.html

7. Facility identification number (FID)

Provide the facility identification (FID) number that appears on the annual emissions inventory reports. If your facility has never submitted such reports and does not have an FID, then leave this blank. The DNR will assign an FID to your facility.

8. Briefly describe the facility to be permitted

Use the table of units and activities provided in this question to describe the facility's processes, control devices used, and other equipment. The on-line application does not have the capability of including this table. Instead, use the answers you checked in the table and type the results into the space provided in the on-line application.

[7] Here "affected sources" means facilities regulated under the acid rain program, typically large utilities.

ATTACHMENT 1

State of Wisconsin
Department of Natural Resources

AIR POLLUTION CONTROL APPLICATION WORKSHEET
TYPE C REGISTRATION PERMITS FOR PRINTERS
IDENTIFICATION OF ELECTION FOR PROCESS LINE SPECIFIC ALTERNATE ORGANIC COMPOUND LIMITS

ATTACHMENT 1 TO FORM # 4530-172 (rev. 04/07)

ALL FACILITIES APPLYING FOR THE TYPE C REGISTRATION PERMIT FOR PRINTERS MUST SUBMIT THIS FORM. Facilities eligible for this permit are likely to have process lines subject to s. NR 424.03(2), Wis. Adm. Code. Each of those process lines must meet one of the following: 1) Control organic compounds emitted by the process line by 85%, 2) Cap organic compound emissions from each process line to 10 tons per year or, 3) Elect to meet an applicable RACT limit listed in ss. NR 422.14, 422.142, or 422.145, Wis. Adm. Code.

INSTRUCTIONS: For each process line subject to the requirements of s. NR 424.03(2), list the process ID (P01, P02, etc.) a brief description of the process line, and indicate the limit that you plan to meet for that process. You may elect a different limit for each process line. A process line is defined to mean one or more actions or unit operations which must function simultaneously or in sequence to manufacture or modify a product. For example, a press and its associated on-machine and off-machine cleaning operations is considered to be a process line.

By approving coverage for a facility under the Type C Registration Permits for Printers, the Department has approved the organic compound limit elected by the facility for each process line included on this Attachment.

Identification of Election for Process Line Specific Alternate Organic Compound Limits						
Process ID	Description	**Organic Compound Limit (Place a check mark in column for the limit you plan to meet)**				
		85% control	**LACT-10 TPY cap**	**RACT[8]**		
				422.14	**422.142**	**422.145**

[8] Process lines that consist of flexographic and rotogravure presses may elect to meet requirements of s. NR 422.14. Process lines that consist of non-heatset lithographic presses may elect to meet the requirements of s. NR 422.142. Process lines that consist of screen printing presses may elect to meet the requirements of s. NR 422.145. A process line includes associated on-machine and off-machine cleaning operations.

ATTACHMENT 2

State of Wisconsin
Department of Natural Resources

AIR POLLUTION CONTROL APPLICATION WORKSHEET
TYPE C REGISTRATION PERMITS FOR PRINTERS
Modeling Assessment
ATTACHMENT 2 TO FORM # 4530-172 (rev 04/07)

Facility name and	Name	
Facility location	Street or Route Address	
	City, County	
Permit contact person	Name	
	Title	
	Telephone	
	Fax	
	E-mail	
Facility SIC or NAICS code:		Facility identification number (FID):

INSTRUCTIONS

PART 1: Complete and submit Part 1 with the signed copy of your Registration Permits for Printers Application, if one of the following applies:

- You have performed your own air quality modeling analysis of particulate matter emissions;
- Stacks at your facility do NOT meet the Registration Permit stack requirements (see the application worksheet Question 7. for details) and you are required to perform your own air quality modeling analysis – general ventilation stacks and stacks venting only insignificant emissions units (see Attachment 3 for a list) do not have to meet the stack criteria.

PART 2: Complete and submit Part 2 with the signed copy of your Registration Permit Application if all of the following apply:

- You answered NO to Question 8 of the worksheet; and
- All of the stacks at your facility, except for general ventilation stacks and stacks venting only insignificant emissions units (see Attachment 3 for a list), meet the Registration Permit stack requirements specified in the application worksheet; and
- You did not perform your own air dispersion modeling.

PART 1 – DISPERSION MODELING RESULTS

Pollutant	PM		SO_2			CO		NOx	Other specify
	24-hr	Annual	3-hr	24-hr	Annual	8-hr	1-hr	Annual	
Please Enter the Concentration from the Dispersion Model (in micrograms per cubic meter) (Refer to the Registration Permit Modeling Guidance[9] for details)									
Please Enter the Regional Background Concentration for your County (in micrograms per cubic meter) (Refer to the Registration Permit Modeling Guidance[3] for details)									
Total of the Two Entries above (in micrograms per cubic meter)									
Air Quality Standards (in micrograms per cubic meter	150	50	1300	364	78	10000	40000	100	

[9] Registration Permit Modeling Guidance is available at http://dnr.wi.gov/org/aw/air/apii/regpermits.html

PART 2 – DISPERSION MODELING REQUEST

Note: The Department will perform dispersion modeling for particulate matter only for facilities that meet the ROP stack requirements. If any stacks at your facility do not meet the stack requirements, you must perform air dispersion modeling for your facility and provide the results of air dispersion modeling in Part 1.

Special Instructions for Part 2:

DO NOT COMBINE STACKS. Each stack that vents externally and has particulate matter emissions should be listed separately.

A Scaled facility plot plat including building heights is necessary for the timely completion of the modeling analysis. Please ensure the following information is on the plot plan:

- ✓ True North
- ✓ A Scale (1 in = 100 ft, etc.)
- ✓ Clearly Marked Structures and Structure Heights
- ✓ All Externally Vented Stacks
- ✓ Any Fences, Roadways, and Physical Obstructions to Plant Property
- ✓ Property Line

Need help filling out this Part? If your facility reports to the Air Emissions Inventory, stack specific information such as previously assigned stack and process identifiers, and stack modeling parameters may be available in your inventory report. Questions? Contact your regional air compliance contact or the ROP Coordinator Kristin Hart (608)273-5605

Stack Identifier (e.g. S01)						
Process Identifier (e.g. P10, B20)						
Stack Height Above Ground (ft)						
Stack Diameter or Dimensions (ft)						
Normal Exhaust Temperature (^{o}F)						
Normal Exhaust Flow (acfm)						
Particulate Matter Emission Rate (lb/hr)						

ATTACHMENT 3

THE FOLLOWING EMISSION UNITS AND ACTIVITIES ARE CONSIDERED INSIGNIFICANT FOR PURPOSES OF TYPE C REGISTRATION PERMIT STACK REQUIREMENTS

27. Convenience space heating units with heat input capacity of less than 5 million Btu per hour that burn gaseous fuels, liquid fuels or wood
28. Convenience water heating
29. Maintenance of grounds, equipment and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs and cleaning, but not including use of organic compounds as cleanup solvents
30. Boiler, turbine, generator, heating and air conditioning maintenance
31. Pollution control equipment maintenance
32. Internal combustion engines used for warehousing and material transport, forklifts and courier vehicles, front end loaders, graders and trucks, carts and maintenance trucks
33. Fire control equipment
34. Janitorial activities
35. Office activities
36. Fuel oil storage tanks with a capacity of 10,000 gallons or less
37. Stockpiled contaminated soils
38. Demineralization and oxygen scavenging of water for boilers.
39. Purging of natural gas lines.
40. Particulate matter from natural gas combustion in press dryers, control device, and other heating units so long as fuel usage or heat input capacity caps in Attachment 1 are met.
41. Aerosol cans
42. Pad printing
43. Pre-press equipment, such as: photo-processing, typesetting, or image-setting equipment;
44. Proofing systems utilizing water-based, ink jet, dry toner, or dye sublimation or proof press designed to evaluate product quality;
45. Plate-making equipment or screen preparation activities utilizing water-based developing solutions;
46. Equipment used to make blueprints.
47. Cold cleaning manual parts washers with less than 10 square feet of surface area.
48. Dry toner or other digital presses that apply water-based inks.
49. Substrate finishing activities which involve paper folding, cutting, folding, trimming, die cutting, embossing, foil stamping, drilling, saddle stitching, sewing, perfect binding, vacuum forming or other activities that do not generate VOCs and whose particulate emissions are vented inside the facility.
50. Adhesive application activity involving hot melt, extrusion, catalyzed solvent-less, or water-based adhesives.
51. Pneumatic system for collecting paper/film/paperboard scrap from cutting operations.
52. Any emission unit, operation, or activity that has, for each air contaminant, maximum controlled emissions that are less than the level specified in Table 3 of ch. NR 407, Wis. Adm. Code. Multiple emissions units, operations, or activities that perform identical or similar functions shall be combined for the purposes of this determination.
53. If the maximum controlled emissions of any air contaminants listed in Table 3 of ch. NR 407, Wis. Adm. Code, from all emission units, operations or activities at a facility are less than 5 times the level specified in Table 3, for those air contaminants, any emission unit operation or activity that emits only those air contaminants.