

TRANSACTAL
W060710

APPENDIX 5

Suggested Form for Notice of Intent (NOI) for the Noncontact Cooling Water General Permit

1. General facility information. Please provide the following information about the facility.

a) Name of facility: <u>Zinsser Co. Inc.</u>		Type of Business: <u>Paints, Varnishes and allied Products</u>
Facility Location Address :	Facility SIC codes:	Facility Mailing Address (if not location address)
longitude: <u>71 17' 22" wide</u> latitude: <u>41 56' 22" N</u>	<u>2851, 2064</u>	<u>113 Olive Street</u> <u>Attleboro, Ma. 02703</u>
b) Name of facility owner: <u>Zinsser Co. Inc.</u>		Email address of owner:
Owner's Tel #: <u>(508) 222-3710</u>	Owner's Fax #: <u>(508) 226-5802</u>	Owner is (check one): 1. Federal <input type="checkbox"/> 2. State <input type="checkbox"/> 3. Tribal <input type="checkbox"/>
Address of owner (if different from facility address)		4. Private <input checked="" type="checkbox"/> 5. Other <input type="checkbox"/> (Describe)
Legal name of Operator, if not owner: <u>Donald Mikutei</u>		
Operator Contact Name: <u>Donald Mikutei</u>		
Operator Tel Number: <u>(508) 222-3710</u> Fax Number: <u>(508) 226-5802</u>		
Operator's email: <u>donald.mikutei@zinsser.com</u>		
Operator Address (if different from owner)		
d) Attach topographic map indicating the locations of the facility and the receiving water; all NCCW discharge points; upstream and downstream monitoring points. Map attached? <u>yes</u>		
e) Check Yes or No for the following:		
1. Has a prior NPDES permit been granted for the discharge? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Permit Number: <u>MAG250958</u>		
2. Is the discharge a "new discharge" as defined by 40 CFR Section 122.22? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
3. Is the facility covered by an individual NPDES permit? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If Yes, Permit Number <u>MAG250958</u>		
4. Is there a pending application on file with EPA for this discharge? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, date of submittal: <u>2005</u>		

No.9164 P. 2

Manrose-Haeuser Company

Oct. 3. 2008 3:34PM

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed)

a) Name of receiving water into which discharge will occur: Ten Mile River
 State Water Quality Classification: class B Freshwater: yes Marine Water: _____

b) Describe the discharge activities for which the owner/applicant is seeking coverage: Discharge to Ten Mile River is non-contact cooling water from a private well

c) FOR MASSACHUSETTS FACILITIES ONLY: Engineering Calculations: Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment A of the General Permit. Check if attached: _____

d) Number of outfalls 3
001 - no flow
003
004

For each outfall:

e) What is the maximum daily and average monthly flow of the discharge? Note that EPA will use the flow reported here as the facility's permitted effluent flow limit. Max Daily Flow .65 mgd GPD Average Flow .31 mgd GPD

f) What is the maximum daily and average monthly temperature of the discharge (in degrees F)? Max Temp. 83 Average Temp. 70

g) What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH 8.3 Min pH 6.8

h) FOR MASSACHUSETTS FACILITIES ONLY: Is the source water of the NCCW potable water? Yes _____ No ✓ If Yes, EPA will calculate the Total Residual Chlorine limit for facilities located in Massachusetts.

i) Is the discharge continuous? Yes _____ No ✓ If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) P
 If (P), number of days or months per year of the discharge 16 and the specific months of discharge 12 months 16 days a month;
 If (I), number of days/year there is a discharge _____

j) Latitude and longitude of each discharge within 100 feet: outfall 1: long. 71 17 22' lat. 41 56' 22"; outfall 2: long. _____ lat. _____;
 outfall 3: long. _____ lat. _____ (See http://www.epa.gov/tri/report/siting_tool)

k) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 1.39 cfs
 Please attach any calculation sheets used to support stream flow and dilution calculations. See General Permit Attachment B for equations and additional information.

MASSACHUSETTS FACILITIES: See Part 3.4 and Appendix 1 of the General Permit for more information on ACEC.
 Areas of Critical Environmental Concern (ACEC): Does the discharge occur in an ACEC? Yes _____ No ✓
 If yes, provide the name of the ACEC: _____

need well metab data

3. NCCW Source Water Information. Please provide information about the NCCW source water, using separate sheets as necessary:

<p>a) Indicate source of the NCCW (i.e., municipal water supply, private well, surface water withdrawal, groundwater):</p> <p>Source: <u>private well water</u></p> <p>Name of Source Water: <u>olive street well Attleboro Ma.</u></p> <p>Is the source registered/permitted under MA Water Management Act or NHDES Water User Registration Rule (Env Wq 2202)?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>If yes, registration number: _____</p>	<p>b) If source water is surface water:</p> <p>i) Is it a freshwater river or stream Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>ii) Is it a lake? _____ reservoir? _____</p> <p>iii) Is it tidal river? _____ estuary? _____ ocean? _____</p> <p>c) Is the source water groundwater? Yes <u>yes</u> No <input type="checkbox"/> If yes, see Appendix 8 and submit effluent and surface water test results, as required in Part 5.4 of the General Permit.</p> <p>d) Does the facility use both a primary and backup source of noncontact cooling water?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>If yes, attach information that identifies and explains the primary and backup sources of noncontact cooling water for and how often the backup supply was used in last three years.</p>
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4. Best Technology Available for CWIS

Are you subject to BTA requirements at Part 4.2 of the General Permit? (Facility's discharge is covered by this General Permit and the facility withdraws noncontact cooling water from surface source water). Yes No If No, explain: Water comes from a private well

If YES, attach the facility-specific BTA description as required in Part 4.3 of the General Permit. For additional information and guidance, see Questions 13-23 of the NCCW Fact Sheet, posted at <http://www.epa.gov/region1/npdes/nccwgp.html>. Provide a map showing the location of each CWIS intake structure; NCCW outfall(s) and any CWIS feature referred to in the BTA description.

Include in your description:

- _____ Measures to meet the General Permit Part 4.3.a general BTA requirements, including documentation that describes the facility's monitoring program for impinged fish and/or invertebrate; or the required alternative monitoring plan frequency and/or protocol
- _____ A characterization of the source water body's aquatic life habitat in the vicinity of each CWIS during the seasons when the CWIS may be in use
- _____ The attributes of the current CWIS
- _____ Design measures of the CWIS
- _____ Operation measures of the CWIS
- _____ Historical occurrence of impinged fish for the past five years
- _____ If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system
- _____ Other components to reduce impingement and/or entrainment of aquatic life

8. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit

9. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (see below) including the following certification:

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: Zinsser Co. Inc.
Operator signature: 
Title: EHS Manager
Date: 10/3/08

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

ATTACHMENT A of General Permit Continued

(3) Often, the facility discharge is given in units of gallons per day, or million gallons per day (mgd). Use the conversion factor of 0.645 mgd/cfs or 0.645 mgd per 1 cfs to convert from cfs to mgd.

Therefore, for this equation, we are assuming all of the waste heat from the facility is transferred to the river. The waste heat from the facility can either be calculated using the maximum change in temperature and the maximum effluent flow or it can be determined by plant engineering personnel.

EXAMPLE 1:

A facility has a maximum permitted flow rate of 1 mgd. The maximum amount of heat that needs to be rejected from the plant is 10,000 btu/hr. The 7Q10 of the river has been determined to be 325 cfs. What is the maximum calculated change in river temperature? The plant is located in a Massachusetts Warm Water fishery.

SOLUTION 1:

Since all of the heat rejected by the plant is assumed to be absorbed by the river, $Q_p = Q_r$ and $Q_r = C_p M_r \Delta T_r$ or $\Delta T_r = Q_r / C_p M_r$

$$Q_r = 10,000 \text{ btu/hr}$$

$$\text{Convert 325 cfs to mgd, } 325 \text{ cfs} \times 0.645 \frac{\text{mgd}}{\text{cfs}} = 209.6 \text{ mgd}$$

$$\Delta T_r = (10,000 \text{ btu/hr}) / (1 \text{ btu/lb}^\circ\text{F}) \times (24 \text{ hrs/day}) \times (\text{gal}/8.34 \text{ lbs}) / 209.6 \times 10^6 \text{ gal/day}$$

$$= 1.37 \times 10^{-4} \text{ }^\circ\text{F}$$

In this example, the facility has demonstrated that the receiving water will be protected. Therefore, no in-stream monitoring would be required.

EXAMPLE 2:

A facility has a maximum reported ΔT of 35°F. The maximum plant design is 1 mgd. The 7Q10 is determined to be 125 cfs. The plant is located in a Massachusetts Cold Water fishery.

SOLUTION 2:

$$\text{Convert 125 cfs to mgd, } 125 \text{ cfs} \times 0.645 \frac{\text{mgd}}{\text{cfs}} = 80.62 \text{ mgd.}$$

$$\Delta T_r = m_p / m_r \times \Delta T_p$$

$$= (1 \text{ mgd} / 80.62 \text{ mgd}) \times 35 \text{ }^\circ\text{F}$$

$$= 0.43 \text{ }^\circ\text{F}$$

$$\Delta T_r = \frac{0.2 \text{ MGD}}{0.9 \text{ MGD}} = 0.22 \text{ }^\circ\text{F}$$