

**NPDES PERMIT MODIFICATION**

issued to

**Permittee:**

Ansonia Copper & Brass  
75 Liberty Street  
Ansonia, CT 06401

**Location Address:**

75 Liberty Street  
Ansonia, CT 06401

Attention: Robert McGann, Engineering Manager

**Facility ID: 002-002      Permit ID: CT0002968      Permit Modification Expires: March 21, 2011**

This permit modification is issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), section 22a-430-4(p)(5) of the Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, as amended 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a N.P.D.E.S. permit program.

The Commissioner of Environmental Protection ("the Commissioner") has made a final determination on this permit modification and found that modification of the existing system or installation of a new system will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 200800123 for permit modification and the administrative record established in the processing of that application.

Ansonia Copper & Brass, ("Permittee"), shall comply with all conditions of Permit No. CT0002968 issued on March 22, 2006 with the following modifications:

1. Section 7, Paragraph (E) of Permit No. CT0002968 is eliminated.
2. Section 9, Paragraphs (B) and (G) attached hereto replace and supersede Section 9, Paragraphs (B) and (G) of NPDES Permit No. CT0002968 issued March 22, 2006.

The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit modification, Permit No. CT0002968, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions that may be authorized under the Clean Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified under this paragraph may also contain any other requirements of the Clean Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

All other terms and conditions of Permit No. CT0002968 issued on March 22, 2006 shall continue in full force and effect.

This modification is hereby issued on December 1, 2008.

/s/ GINA MCCARTHY  
Gina McCarthy  
Commissioner

GM/mlg  
Permit No. CT0002968  
Sent RRR  
cc: DMR, CTDEP-WPED  
Colette Ready, CTDEP-WPED

## SECTION 9: COMPLIANCE SCHEDULE

- (B) The Permittee shall achieve compliance with the aquatic toxicity effluent limitations contained in Section 5, Table B of this permit as soon as possible, **but in no event later than two (2) years from the date of issuance of this permit's modification**, in accordance with the following:
- (1) On or before thirty (30) days after the date of issuance of this permit, the Permittee shall retain one or more qualified consultants acceptable to the Commissioner to prepare the documents and implement or oversee the actions required by this section of the permit and shall, by that date, notify the Commissioner in writing of the identity of such consultants. The Permittee shall retain one or more qualified consultants acceptable to the Commissioner until the actions required by this section of the permit have been completed, and within ten (10) days after retaining any consultant other than one originally identified under this paragraph, Permittee shall notify the Commissioner in writing of the identity of such other consultant. The consultant retained to perform the studies and oversee any remedial measures required to achieve compliance with Section 5, Table B limitations shall be a qualified professional engineer licensed to practice in Connecticut acceptable to the Commissioner. The Permittee shall submit to the Commissioner a description of a consultant's education, experience and training that is relevant to the work required by this permit within ten (10) days after a request for such a description. Nothing in this paragraph shall preclude the Commissioner from finding a previously acceptable consultant unacceptable.
  - (2) Scope of Study. On or before **two (2) months** from the date of this permit's modification, the Permittee shall submit for the Commissioner's review and written approval a scope of study to perform a Toxicity Reduction Evaluation (TRE). Such scope shall include:
    - (a) a Toxicity Identification Evaluation (TIE) of the discharge performed in accordance with *Methods of Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (2<sup>nd</sup> Edition);
    - (b) a list of alternative actions to achieve compliance with aquatic toxicity limits including, but not limited to, pollutant source reduction, process changes/innovations, chemical substitutions, recycle and zero discharge systems, discharge redirection to the sanitary sewer, water conservation measures, and other internal and/or end-of-pipe treatment technologies;
    - (c) a schedule for conducting the TRE pursuant to this paragraph not to exceed **six (6) months** from the Commissioner's approval of the scope of study.
  - (3) Performance of Investigation. The Permittee shall perform the investigation and other actions specified in the approved scope of study in accordance with the approved schedule. If, during the performance of this investigation, toxicity does not occur in the discharge at levels which exceed the aquatic toxicity limitations of Section 5, Table B of this permit, the Permittee shall continue the investigation in accordance with the approved scope of study and Section 8(B) of this permit upon the next exceedence of such limitations.
  - (4) TRE Report and Implementation Plan. In accordance with the schedule approved by the Commissioner pursuant to Section 9(B)(1) of this permit but no later than **eight (8) months** from the Commissioner's approval of the scope of study, the Permittee shall submit for the Commissioner's review and written approval a comprehensive and thorough report which describes in detail the investigation performed pursuant to Section 9(B)(2) of this permit and which:
    - (a) lists all sources of aquatic toxicity as determined through the TIE;
    - (b) evaluates each alternative remedial action investigated for achieving compliance with

- aquatic toxicity effluent limitations in accordance with the approved scope of study;
- (c) states in detail the most expeditious schedule for performing each alternative;
  - (d) lists all permits and approvals required for each alternative, including but not limited to, any permits required under sections 22a-32, 22a-42a, 22a-342, 22a-361, 22a-368, 22a-430 or 22a-430b of the Connecticut General Statutes;
  - (e) proposes a preferred alternative or combination of alternatives with supporting justification;
  - (f) proposes a detailed program and schedule to perform all actions required by the preferred alternative including but not limited to a schedule for submission of engineering plans and specifications on any internal and/or end-of-pipe treatment facilities, start and completion of any construction activities related to any treatment facilities, and applying for and obtaining all permits and approvals required for such actions; and
  - (g) proposes a study that shall be the basis of the report required under Section 9(B)(6) of this permit, evaluating the effectiveness of remedial actions performed. Such proposal shall at a minimum include four sampling events, taken a minimum of one month apart, analyzed in accordance with this permit.
- (5) Progress Reports. The Permittee shall submit to the Commissioner **quarterly** status reports beginning **sixty (60) days** after the date of approval of the report referenced in Section 9(B)(3) above. Status reports shall include, but not be limited to, a summary of all effluent monitoring data collected by the Permittee during the previous **ninety (90) day** period and a detailed description of progress made by the Permittee in performing the actions required by this section of the permit in accordance with the approved schedule including, but not limited to, development of engineering plans and specifications, construction activity, contract bidding, operational changes, preparation and submittal of permit applications, and any other actions specified in the program approved pursuant to Section (B)(3) above.
- (6) Implementation of Approved Actions. The Permittee shall perform the approved actions in accordance with the approved schedule, **but in no event shall the approved actions be completed later than one (1) year and six (6) months after the date of issuance of this permit's modification.** Within fifteen (15) days after completing such actions, the Permittee shall certify to the Commissioner in writing that the actions have been completed as approved.
- (7) Evaluation of Approved Actions. On or before **six (6) months** from the completion of all approved remedial actions taken pursuant to Section 9(B)(5), the Permittee shall submit a report based on the study required under Section 9(B)(3)(g) summarizing the effectiveness of such remedial actions.

## SECTION 9: COMPLIANCE SCHEDULE

- (G) Submission of documents. Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Michelle L. Gore, Sanitary Engineer  
Department of Environmental Protection  
Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division  
79 Elm Street  
Hartford, CT 06106-5127





DEP STAFF ENGINEER Michelle L. Gore

**PERMIT FEES**

Discharge Code	DSN Number	Annual Fee
101036Z	DSN 002-1	\$8,175.00
1080000	DSN 002-1	\$2,662.50

A permit modification fee of \$750.00 was charged.

**FOR NPDES DISCHARGES**

Drainage basin Code: 6900

Present/Future Water Quality Standard: C/B

**NATURE OF BUSINESS GENERATING DISCHARGE**

Copper forming and casting

**PROCESS AND TREATMENT DESCRIPTION (by DSN)**

DSN 002-1: Equalization, neutralization, flocculation, clarification, sand filtration, ion exchange, sludge dewatering and drying.

**RESOURCES USED TO DRAFT PERMIT**

- Federal Effluent Limitation Guideline 40 CFR Parts 464 & 468  
(Metal Molding and Casting & Copper Forming)
- Performance Standards
- Federal Development Document
- Treatability Manual
- Department File Information
- Connecticut Water Quality Standards
- Anti-degradation Policy
- Coastal Management Consistency Review Form
- Other - Explain

**BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS**

- X Best Available Technology (BAT)  
*Chromium (MDL)*
- X Best Practicable Technology (BPT)  
*pH*
- X Best Professional Judgement  
*Nickel, Total Toxic Organics*
- X Section 22a-430-4(s) of the Regulations of Connecticut State Agencies  
*Iron, Total Suspended Solids, Oil & Grease*  
*Concentration limits for Cadmium, Copper, Lead, Zinc, Chromium (AML)*
- X In order to meet in-stream water quality  
*Aquatic Toxicity, Arsenic*  
*Mass limits for Cadmium, Copper, Lead, and Zinc*

### **COMMENTS**

NPDES Permit No. CT0002968 was reissued March 22, 2006 with a special condition in Section 7 (E) requiring the Permittee to regenerate its ion exchange columns quarterly, according to the schedule set forth in its July 9, 2005 Operation and Maintenance Plan. The reissued permit also contained a compliance schedule requiring the Permittee to meet permitted aquatic toxicity effluent limitations by operating in accordance with the July 9, 2005 Operation and Maintenance Plan and evaluating the effectiveness of the quarterly ion exchange regeneration frequency prescribed by that plan.

As a result of operating in accordance with the plan and evaluating its effectiveness, the Permittee determined that quarterly regeneration does not appear to improve the toxicity of its effluent at DSN 002-1 as toxicity failures occur even after the ion exchange resin is changed. Therefore, the Permittee requests to operate its ion exchange system according to the manufacturer's specifications, which recommend regenerating and changing out the ion exchange resin on a flow-based schedule. Given the Permittee's current average daily discharge flow of approximately 36,600 gpd and manufacturer's specifications, the Permittee approximates the ion exchange resin will be regenerated approximately semi-annually, rather than quarterly. This permit modification therefore eliminates Section 7(E) of the permit.

In response to violations of the aquatic toxicity limits specified in Section 5, Table B of this permit which have occurred since the time of permit reissuance, despite the report submitted pursuant to Section 9(B), the compliance schedule in Section 9(B) of this permit was replaced with a schedule which requires the Permittee to obtain compliance with aquatic toxicity limits by performing a complete toxicity evaluation and reduction analysis and implementing the remedial actions identified through such analysis. Section 9(G) is also modified to update the DEP staff person to whom certain submittals should be addressed.