STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF : ***APPLICATION NO. 200401538***

WHYCO FINISHING TECHNOLOGIES, LLC : ***DECEMBER 19, 2007***

FINAL DECISION

The above-captioned matter concerns renewal of the National Pollutant Discharge Elimination System Permit No. CT0001457 (Permit) authorizing the applicant, Whyco Finishing Technologies, LLC, to discharge wastewaters into the Naugatuck River from its facility at 670 Waterbury Road in Thomaston, Connecticut. In seeking to resolve all issues in controversy by agreement, the parties submitted a Stipulation and Agreed Draft Decision (Agreed Draft Decision). Regs. Conn. State Agencies §§ 22a-3a-6(l)(3)(A). After the public hearing, the hearing officer accepted the Agreed Draft Decision and submitted it for my consideration.[1]

I concur with the hearing officer's decision to accept the Agreed Draft Decision. I therefore adopt the parties' agreement as my Final Decision and authorize renewal of the Permit, as set forth in the Agreed Draft Decision (Attachment A).

Gina McCarthy
Commissioner

[1] See Regs. Conn. State Agencies §§ 22a-3a-6(d)(2)(I), 22a-3a-6(l)(3)(A)(ii). By written stipulation, the parties and the agency waived compliance with the proposed final decision requirements and the hearing officer did not issue a proposed final decision in this matter. Conn. Gen. Stat. § 4-179(d).

PARTY LIST

In the Matter of Whyco Finishing Technologies, LLC
Application No. 200401538

PARTY	*REPRESENTED BY*
APPLICANT	
Whyco Finishing Technologies, LLC 670 Waterbury Road Thomaston, CT 06787	Diane W. Whitney Pullman & Comley, LLC 90 State House Square Hartford, CT 06103 Fax: (860) 434-4370 Direct: (860) 424-4330
DEP	
Michelle Gore Melissa Blais Stephen Edwards Kevin Barrett Department of Environmental Protection Materials Management and Compliance Assurance, Permitting and Enforcement Division 79 Elm Street Hartford, CT 06106 Phone: (860) 424-3834 Fax: (860) 424-4074	
INTERVENOR	
Connecticut Fund for the Environment, Inc. Save the Sound:	Roger Reynolds, Senior Staff Attorney 1st Floor 205 Whitney Avenue New Haven, CT 06511-3725 Fax: (203) 787-0246

Attachment A

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ADJUDICATIONS

IN THE MATTER OF	:	**APPLICATION NO. 200401538**
WHYCO FINISHING TECHNOLOGIES, LLC	:	**DECEMBER 7, 2007**

STIPULATION AND AGREED DRAFT DECISION

I. Introduction

Pursuant to § 22a-3a-6(1)(3)(A)(ii) of the Regulations of Connecticut State Agencies, the applicant Whyco Finishing Technologies, LLC ("Applicant" or "Whyco"), the intervenor Connecticut Fund for the Environment, Inc./Save the Sound ("Intervenor" or "CFE"), and staff of the State of Connecticut Department of Environmental Protection ("DEP") hereby respectfully submit this Agreed Draft Decision, stipulating to the resolution of the above-captioned application matter through renewal of Applicant's National Pollutant Discharge Elimination System Permit No. CT0001457 under the terms and conditions set forth in Attachment A ("Stipulated Permit"). This Stipulated Permit includes revisions to the permit proposed by DEP in its Notice of Tentative Determination. Furthermore, pursuant to § 4-179 of the Connecticut General Statutes, the undersigned parties also waive the Hearing Officer's requirements to comply with the provisions for making and serving a written proposed final decision in this matter.

II. Brief Procedural History

Applicant is an industrial metal finisher with a facility at 670 Waterbury Road in Thomaston, Connecticut, 06787, Facility ID No. 140-010. (DEP-1a).[1] On June 23, 2004, Whyco submitted to DEP Application No. 200401538 ("Application") to renew its state wastewater discharge permit, No. CT0001457. (DEP-5). That permit, which was issued November 3, 1999, authorizes Whyco to discharge treated metal finishing wastewaters to the Naugatuck River. (DEP-8). The Application includes an extensive summary, a general description of the applicant's business, site and floor plans, topographical maps, discharge quantities and certification that the company maintains a spill prevention and control plan. It also includes descriptions of the proposed wastewater collection, treatment and disposal system, specific discharge information and an evaluation of the characteristics of said discharge.

On August 4, 2007, after review by DEP staff of the application and the supplemental information submitted by Whyco, DEP published in the Waterbury Republican-American its Notice of Tentative Determination to grant Whyco's renewal application. (DEP-2a).

On August 28, 2007, DEP received petitions with the signatures of more than twenty-five persons requesting a public hearing on the renewal application. On September 21, 2007, CFE filed a Notice of Intervention as a party in the Whyco and other permit proceedings under the Connecticut Environmental Protection Act, Conn. Gen. Stat. § 22a-19(a), which was granted by the Hearing Officer on October 1, 2007.

[1] Citations in this Agreed Draft Decision to DEP exhibits (e.g. "DEP-1") refer to the exhibits filed by DEP, as part of its December 7, 2007 prehearing exchange of information. A description of each such exhibit may also be found in Section V herein.

On October 11, 2007, CFE requested a one-month extension of Whyco's hearing date to allow the parties the opportunity to resolve their differences prior to a hearing. This request was granted by the Hearing Officer on October 16, 2007.

On October 2, 2007, the Commissioner published notice in the Waterbury Republican-American that the public hearing in this matter would be held on November 5, 2007 at 9:30 A.M. in the Russell Room at the DEP offices in Hartford, and that the public comment session would be held on November 15, 2007 at 7:30 P.M. at the Thomaston Town Hall in Thomaston, Connecticut. (DEP-4a) On November 16, 2007, the Hearing Officer issued a ruling granting CFE's request for an extension of the date of the public hearing and rescheduling the public hearing for December 14, 2007 at 9:30 A.M.

The public comment session was held as originally scheduled on November 15, 2007. At this portion of the hearing, DEP's Stephen Edwards testified with respect to the application filed by Whyco, other portions of the record in this proceeding, including but not limited to the circumstances and standards on which DEP is basing the effluent limitations proposed in the permit, and the Commissioner's tentative determination to renew the permit pursuant to section 22a-430 of the Connecticut General Statutes. Albert Atkinson General Manager and Vice-President of Whyco, and Attorney Roger Reynolds, representing CFE, reported that all three parties had reached agreement on specific revisions to the permit proposed by DEP in its Notice of Tentative Determination.

III. Outline of Issues in Controversy

In its petition to intervene, CFE raised three issues: (1) that activities proposed in the permit will have, or will be reasonably likely to have, the result of unreasonably polluting, impairing or destroying the public trust in the waters or other natural resources

of the State of Connecticut in violation of section 22a-19 of the General Statutes and are in violation of the federal Clean Water Act and the regulations and policies of the DEP, (2) that discharges set forth in the draft permit will continue to pollute and impair the upper Naugatuck River and are insufficient to assure the attainment of water quality standards as required by section 303(d) of the Clean Water Act, and (3) that prudent and feasible alternatives exist to the proposed limits including, but not limited to, reducing permit limits for metals and toxicity and increasing testing for heavy metals and for aquatic toxicity.

IV. Resolution of Issues in Controversy

The parties stipulate that all issues raised by the Intervenor will be resolved through the Hearing Officer's acceptance of this Stipulation and Agreed Draft Decision, the Commissioner's adoption of this agreement as her Final Decision in substantially the form set forth in Attachment B, and the issuance of the Stipulated Permit as set forth in Attachment A. Collectively, the Applicant, the DEP and the Intervenor have reached agreement on the terms of the Permit No. CT0001457, as set forth in the Stipulated Permit. Specifically, the parties and DEP have agreed to amend the draft permit as summarized below.

The parties have agreed to shorten several deadlines set forth in sections 5 and 10 of the Stipulated Permit, requiring that the Applicant complete specified investigations, reports and other actions, as proposed by Applicant and approved by DEP, to achieve compliance with aquatic toxicity and other effluent limitations set forth in section 5, Table B. See Stipulated Permit, §§ 5(A) (introduction and remarks of Tables A-B), 10(A), 10(B)(1), 10(B)(3), 10(B)(5) and 10(B)(6). The permit proposed by DEP in its Notice of Tentative Determination would have imposed deadlines allowing Whyco a total

time period of up to five years from the date of permit issuance to complete these actions and achieve compliance with the effluent limitations in Table B. (DEP-1a). The Stipulated Permit reduces deadlines and the total time period to only three years and six months from the date of permit issuance. See, id.

The Stipulated Permit would also add a requirement that Whyco include, in its Scope of Study, proposed sampling and analytical measures to supplement the aquatic toxicity monitoring required under Section 5, Table A of the revised permit during the investigation. See Stipulated Permit, § 10(B)(1). The Stipulated Permit would also expand the Investigation Report to include a compilation of aquatic toxicity monitoring data generated from investigations and monitoring performed and made publicly available by DEP, or performed by Whyco, after the date of permit issuance. See Stipulated Permit, § 10(B)(3)(a). The Investigation Report would also include verification of whether Whyco is achieving compliance with the Maximum Instantaneous Limits of Section 5, Table B of the permit. See, id.

Section 10(B)(6) requires Whyco to perform additional discharge monitoring and to evaluate the effectiveness of its approved remedial actions. The Stipulated Permit would add a requirement that, after completing this study and until the "Final Compliance Date" (three years and six months from permit issuance), Whyco must continue to evaluate the effectiveness of such remedial actions by sampling and analyzing its discharge for the parameters identified in Section 5, Table B on a bimonthly or other more frequent schedule, and by reporting the results in its discharge monitoring report in accordance with R.C.S.A. § 22a-430-3(j)(6) and other applicable permit terms.

The Stipulated Permit also reduced the average daily flow of discharge from Whyco to 80,000 gallons per day from 120,000 gallons per day. The aquatic toxicity limits contained in Tables A and B and the aquatic toxicity test procedures contained in Section 6(B)(4)(a) were revised consistent with the reduced flow.

In addition, discharge descriptions in Tables A, B and C were revised to include groundwater and the fact sheet was amended to indicate that no more than 1,400 gallons of groundwater may be treated in the chromium pretreatment system in any one day. The discharge descriptions in Tables A and B were also revised to include cooling tower blow down.

V. Stipulation to Exhibits

For purposes of this Stipulation and Agreed Draft Decision, the parties stipulate to the admissibility and incorporate, by reference, herein the following exhibits that were included in the parties' prehearing exchanges of information filed in this proceeding:

Applicant Exhibit:

APP-1 Statement of credentials for Whyco's Expert Witnesses, Barbara Lewis

Intervenor Exhibit:

INT-1 C.V. of Shimon C. Anisfield, Ph.D.

DEP Exhibits:

DEP-1a Proposed draft permit to reissue NPDES Permit No. CT0001457

DEP-1b Draft NPDES Permit No. CT0001457 Fact Sheet

DEP-2a Notice of Tentative Determination to Renew a National Pollutant Discharge Elimination System Permit to Discharge into the Waters of the State, signed on July 25, 2007 and published in the Waterbury Republican on August 4, 2007

DEP-2b Affidavit of Publication of Notice of Tentative Determination, October 18, 2007

DEP-3 Request for Public Hearing, received August 27, 2007

DEP-4a Notice of Public Hearing, published in the Waterbury Republican on October 2, 2007

DEP-4b Affidavit of Publication of Notice of Public Hearing, October 18, 2007

DEP-5 Discharge Permit Application No. 200401538

DEP-6 Certification of Notice of Application

DEP-7a July 11, 2006 Whyco Finishing Technologies LLC submittal

DEP-7b Treatment System Modification Approval to install dated August 1, 2006

DEP-7c April 19, 2006 Whyco Finishing Technologies LLC submittal

DEP-8a NPDES Permit No. CT 0001457, iss
ued November 3, 1999

DEP-8b Minor modification to NPDES Permit No. CT 0001457, issued December 15, 2000

DEP-9 CT DEP List of Witnesses and Staff Qualifications, dated October 17, 2007

DEP-10 Hearing Statement, Stephen Edwards, December 4, 2007

DEP-11a "Water Quality Analysis of the Upper Naugatuck River", CT DEP – February 1988

DEP-11b EPA review letter of "Water Quality Analysis of the Upper Naugatuck River", dated January 18, 1990

DEP-11c Memo from Art Mauger on the implementation of BOD limits, dated June 16, 2006

DEP-12a "Total Maximum Daily Load Analysis for the Upper Naugatuck River, Thomaston, CT", CT DEP – March 1, 2005

DEP -12b Affidavit of Publication – Notice of Intent to Adopt a Total Maximum Daily Load for the Upper Naugatuck River, dated August 11, 2004

DEP-12c "Response to Comments for A Total Maximum Daily Load Analysis for the Upper Naugatuck River, dated August 11, 2004

DEP-12d Final TMDL Transmittal Letter from CT DEP to EPA, dated March 7, 2005

DEP-13 "Upper Naugatuck River TMDL Support Document – TMDL Implementation:Recommended Procedures for Determining the NPDES Permit Limits for Metals". CT DEP – December 13, 2004

DEP-14 EPA Approval Letter Re: Notification of approval of Upper Naugatuck TMDL and EPA New England's TMDL Review, dated August 17, 2005

DEP-15 Potential Environmental Impacts on the Naugatuck River from Four Industrial Facilities located in Thomaston

DEP-16 DEP internal memo dated June 7, 2006, RE: Final Recommendations/Metals Allocations

DEP-17 Chapter 5, Permit Requirements. Technical Support Document for Quality –based Toxics Control. EPA 505/2-90-001.

DEP-18 DEP Internal Memo RE: Groundwater Flow Estimates for RCRA Facilities in Thomaston, dated December 14, 2004.

DEP-19 CT DEP Document RE: "Derivation of Proposed Permit Limits for copper, lead, nickel and zinc based on the Total Maximum Daily Load Analysis for the Upper Naugatuck River", explanation prepared by Kevin Barrett on October 4, 2007.

DEP-20 Hearing Statement, Christopher Bellucci, November 19, 2007

DEP-21 DEP internal memo dated August 29, 2006, RE: Naugatuck TMDL (MOS Allocation)

DEP-22 October 4, 2004 Whyco Finishing Technologies LLC submittal

DEP-23 e-mail from Barbara Lewis dated November 5, 2007

DEP-24 e-mail from Barbara Lewis dated November 7, 2007

DEP-25 e-mail from Barbara Lewis dated November 26, 2007

DEP-26 e-mail from Barbara Lewis dated December 3, 2007

DEP-27 intentionally left blank

DEP-28 "A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound", CT DEP – December 2000

DEP-29 intentionally left blank

DEP-30a December 4, 2006 Whyco Finishing Technologies LLC submittal

DEP-30b Treatment System Modification Approval to install an ultraviolet unit dated May 29, 2007

DEP-31 June 24, 2004 Whyco Finishing Technologies LLC submittal

DEP-32 September 23, 2005 Whyco Finishing Technologies LLC submittal

VI. Conclusion

For all of the foregoing reasons, and pursuant to section 22a-430-4(i) of the DEP's Discharge Permit Regulations and section 22a-3a-6(l)(3)(A)(ii) of the Rules of Practice of the DEP, the Applicant, together with the DEP and the Intervenor, respectfully request that this Agreed Draft Decision be accepted by the Hearing Officer and reported to the Commissioner for adoption as her Final Decision, in resolution of the above captioned application matter.

[Remainder of Page Intentionally Left Blank. Signature Pages Follow.]

APPLICANT
WHYCO FINISHING TECHNOLOGIES, LLC.

By _____

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Its Attorney

INTERVENOR
CONNECTICUT FUND FOR THE ENVIRONMENT, INC. / SAVE THE SOUND

By _____

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STAFF
DEPARTMENT OF ENVIRONMENTAL PROTECTION

By _____

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Bureau of Materials Management and Compliance Assurance
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106
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Fax: (860) 424-4074

CERTIFICATION

I hereby certify that a copy of the above hereof was faxed and mailed in a properly addressed, first class postage pre-paid envelope or hand-delivered, on the 7th day of December, 2007 to the following persons at the following addresses. Exhibits from DEP and CFE are provided by those organizations under separate cover.

DEP Hearing Officer:	Kenneth M. Collette, Hearing Officer DEP Office of Adjudications 79 Elm Street, 3rd Floor Hartford, CT 06106 Fax: (860) 424-4052
Department of Environmental Protection	Stephen Edwards Melissa Blais Michelle Gore Kevin Barrett Department of Environmental Protection Materials Management and Compliance Assurance, Permitting and Enforcement Division 79 Elm Street Hartford, CT 06106 Phone: (860) 424-3834 Fax: (860) 424-4074
Rivers Alliance of CT:	Margaret Minor Rivers Alliance of Connecticut P.O. Box 1797 Litchfield, CT 06759 Fax: (860) 361-9341
CT Fund for the Environment, Inc. Save the Sound:	Roger Reynolds, Senior Staff Attorney CFE/Save the Sound – 1st Floor 205 Whitney Avenue New Haven, CT 06511-3725 Fax: (203) 787-0246
Quality Rolling & Deburring Co., Inc.	Attorney Alan M. Kosloff Attorney Mary McQueeney Levy & Droney 28 North Main Street West Hartford, CT 06107 Fax: (860) 521-3352
Summit Corporation of America	Attorney Robert S. Melvin Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 Fax: (860) 275-8299 Direct: (860) 275-8251 Its Attorney

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NPDES PERMIT

issued to

Whyco Finishing Technologies, LLC
670 Waterbury Road
Thomaston, Connecticut 06787

Whyco Finishing Technologies, LLC
670 Waterbury Road
Thomaston, Connecticut 06787

Facility ID: 140-010

Permit ID: CT0001457

Receiving Stream: Naugatuck River

Permit Expires:

SECTION 1: GENERAL PROVISIONS

(A) This permit is reissued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and 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 an N.P.D.E.S. permit program.

(B) Whyco Finishing Technologies, Inc., ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3 General Conditions

(a) Definitions
(b) General
(c) Inspection and Entry
(d) Effect of a Permit
(e) Duty
(f) Proper Operation and Maintenance
(g) Sludge Disposal
(h) Duty to Mitigate
(i) Facility Modifications; Notification
(j) Monitoring, Records and Reporting Requirements
(k) Bypass
(l) Conditions Applicable to POTWs
(m) Effluent Limitation Violations (Upsets)
(n) Enforcement
(o) Resource Conservation
(p) Spill Prevention and Control
(q) Instrumentation, Alarms, Flow Recorders

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(r) Equalization

Section 22a-430-4 Procedures and Criteria

(a) Duty to Apply
(b) Duty to Reapply
(c) Application Requirements
(d) Preliminary Review
(e) Tentative Determination
(f) Draft Permits, Fact Sheets
(g) Public Notice, Notice of Hearing
(h) Public Comments
(i) Final Determination
(j) Public Hearings
(k) Submission of Plans and Specifications. Approval.
(l) Establishing Effluent Limitations and Conditions
(m) Case by Case Determinations
(n) Permit issuance or renewal
(o) Permit Transfer
(p) Permit revocation, denial or modification
(q) Variances
(r) Secondary Treatment Requirements
(s) Treatment Requirements for Metals and Cyanide
(t) Discharges to POTWs - Prohibitions

(C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.

(D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.

(E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Environmental Protection ("Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least 30 days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure, by the transferee, to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.

(F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.

SECTION 2: DEFINITIONS

(A) The definitions of the terms used in this permit shall be the same as the definitions contained in section 22a-423 of the CGS and section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No Observable Acute Effect Level (NOAEL)" which is redefined below.

(B) In addition to the above, the following definitions shall apply to this permit:

"-----" in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR.

"Average Monthly Limit"; means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in section 22a-430-3(a) of the RCSA.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Maximum Daily Limit", means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l); otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA demonstrating 90% or greater survival of test organisms at the CTC.

"Quarterly", in the context of a sampling frequency, means sampling is required in the months of January, April, July, and October.

"Range During Month" ("RDM"), as a sample type, means the lowest and the highest values of all of the monitoring data for the reporting month.

"Range During Sampling" ("RDS"), as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of: 1) a Composite Sample, or, 2) a Grab Sample Average. For those Permittees with continuous monitoring and recording pH meters, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner, has issued a final determination and found that modification of the existing system or installation of a new system would protect the waters of the state from pollution. The Commissioner's decision is based on **Application No. 200401538** for permit reissuance received on June 11, 2004 and the administrative record established in the processing of that application.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, 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.

(C) 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 which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

(A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.

(B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.

(C) The temperature of any discharge shall not increase the temperature of the receiving stream above 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharge shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharge is restricted by, and shall be monitored in accordance with, the tables below. Table A shall be effective from the day of permit issuance until one day before the Final Compliance Date set forth below; Table B shall become effective on the date occurring three (3) years and six (6) months after the day of permit issuance ("Final Compliance Date"); and Table C shall be effective throughout the term of the permit.

Table A

Discharge Serial Number: 002 | **Monitoring Location:** 1

Wastewater Description: Treated Metal Finishing Wastewater, Cooling Tower Blowdown and Groundwater for Remediation

Monitoring Location Description: Final Neutralization Tank

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test [3]
		Average Monthly Limit	Maximum Daily Limit	Sample/ Reporting Frequency [2]	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Daphnia pulex LC50[4]	%	NA	≥20%	Quarterly	Daily Composite	≥6.7%	NR	Grab	
Aquatic Toxicity, Pimephales promelas LC50[4]	%	NA	≥20%	Quarterly	Daily Composite	≥6.7%	NR	Grab	
Aluminum, Total	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Ammonia, as Total N (January - June & November - December)	mg/l	20.9	52.4	Weekly	Daily Composite	78.6	NR	Grab	
Ammonia, as Total N (January - June & November - December)	kg/d	9.49	23.8	Weekly	Daily Composite	NA	NR	NA	
Ammonia, as Total N (July - September)	mg/l	10	30	Weekly	Daily Composite	45	NR	Grab	
Ammonia, as Total N (July - September)	kg/d	7.382	22.416	Weekly	Daily Composite	NA	NR	NA	
Ammonia, as Total N (October)	mg/l	17	30	Weekly	Daily Composite	45	NR	Grab	
Ammonia, as Total N (October)	kg/d	12.57	22.416	Weekly	Daily Composite	NA	NR	NA	
BOD_5	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
BOD_5	kg/d	22.1	----	Weekly	Daily Composite	NA	NR	NA	
Cadmium, Total	mg/l	0.10	0.20	Weekly	Daily Composite	0.30	NR	Grab	*
Cadmium, Total	g/d	20.4	40.8	Weekly	Daily Composite	NA	NR	NA	*
Chlorine, Free Residual	mg/l	----	----	Weekly	Grab Sample Average	NA	NR	NA	*
Chlorine, Total Residual	mg/l	0.46	0.92	Weekly	Grab Sample Average	1.29	NR	Grab	*
Chlorine, Total Residual	g/d	----	----	Weekly	Grab Sample Average	NA	NR	NA	*

Chromium, Total	mg/l	1.0	2.0	Weekly	Daily Composite	3.0	NR	Grab	
Cobalt, Total	mg/l	2.0	4.0	Quarterly	Daily Composite	6.0	NR	Grab	
Copper, Total	mg/l	0.40	1.0	Weekly	Daily Composite	1.5	NR	Grab	*
Copper, Total	kg/d	0.2161	0.4179	Weekly	Daily Composite	NA	NR	NA	*
Cyanide, Amenable	mg/l	0.098	0.2	Weekly See Remarks	Grab Sample Average	0.3	NR	Grab	
Cyanide, Total	mg/l	0.65	1.2	Weekly See Remarks	Grab Sample Average	1.8	NR	Grab	
Cyanide, Total	kg/d	0.1607	0.3214	Weekly See Remarks	Grab Sample Average	NA	NR	NA	
Flow, Instantaneous	gpm	NA	NA	NR	NA	170	NR	Instantaneous	
Flow, Total	gpd	NA	200,000	Weekly	Daily Flow	NA	NR	NA	
Flow, Average & Maximum [1]	gpd	80,000	200,000	Continuous// Monthly	See Remarks	NA	NR	NA	
Fluoride, Free	mg/l	20.0	30.0	Weekly	Daily Composite	45.0	NR	Grab	
Fluoride, Total	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Iron, Total	mg/l	3.0	5.0	Weekly	Daily Composite	7.5	NR	Grab	
Lead, Total	mg/l	0.053	0.16	Weekly	Daily Composite	0.24	NR	Grab	*
Lead, Total	g/d	40.2	80.4	Weekly	Daily Composite	NA	NR	NA	*
Nickel, Total	mg/l	0.73	1.8	Weekly	Daily Composite	2.7	NR	Grab	
Nitrate as N	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Nitrate as N	lb/day	----	----	Weekly	Daily Composite	NA	NR	NA	
Nitrite as N	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Nitrite as N	lb/day	----	----	Weekly	Daily Composite	NA	NR	NA	
Organics, Total Toxic	mg/l	NA	NA	NR	NA	0.375	Quarterly	Grab	
pH,	S.U.	NA	NA	NR	NA	6.0 to 9.5	Weekly	Range During Sampling	
pH, Continuous	S.U.	NA	NA	NR	NA	6.0 to 9.5	Continuous // Monthly	Range During Month	
Phosphorus, Total	mg/l	----	----	Monthly	Daily Composite	NA	NR	NA	
Silver, Total	mg/l	0.1	0.43	Weekly	Daily Composite	0.64	NR	Grab	*
Silver, Total	g/d	25.0	50.0	Weekly	Daily Composite	NA	NR	NA	*
Solids, Total Suspended	mg/l	20.0	30.0	Weekly	Daily Composite	45.0	NR	Grab	
Surfactants	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Temperature	°F	NA	NA	NR	NA	----	Quarterly	Range During Composite	
Tin, Total	mg/l	2.0	4.0	Weekly	Daily Composite	6.0	NR	Grab	

Total Kjeldahl Nitrogen as N	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Total Kjeldahl Nitrogen as N	lb/day	----	----	Weekly	Daily Composite	NA	NR	NA	
Zinc, Total	mg/l	0.13	0.38	Weekly	Daily Composite	0.57	NR	Grab	
Zinc, Total	kg/l	0.4654	0.9308	Weekly	Daily Composite	NA	NR	NA	

Table Footnotes and Remarks:

Footnotes:

1) For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

2) The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

3) Minimum Level Test refers to Section 6 Paragraph (A)(3) of this permit.

4) Toxicity shall be reported in DMRs as an LC_{50} value.

Remarks:

1) Monitoring of cyanide, both amenable and total, shall be conducted only when the cyanide batch treatment system is discharging.

2) Limits contained in Table A shall be effective until one day before the Final Compliance Date as defined in Section 5 (A).

Table B

Discharge Serial Number: 002 | **Monitoring Location:** 1

Wastewater Description: Treated Metal Finishing Wastewater, Cooling Tower Blowdown and Groundwater for Remediation

Monitoring Location Description: Final Neutralization Tank

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test [3]
		Average Monthly Limit	Maximum Daily Limit	Sample /Reporting Frequency [2]	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Daphnia pulex, LC50[4]	%	NA	≥68%	Quarterly	Daily Composite	≥22.7	NR	Grab	
Aquatic Toxicity, Pimephales promelas, LC50[4]	%	NA	≥68%	Quarterly	Daily Composite	≥22.7	NR	Grab	
Aluminum, Total	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Ammonia, as Total N (January - June & November - December)	mg/l	20.9	52.4	Weekly	Daily Composite	78.6	NR	Grab	
Ammonia, as Total N (January - June & November - December)	kg/d	9.49	23.8	Weekly	Daily Composite	NA	NR	NA	
Ammonia, as Total N (July - September)	mg/l	10	30	Weekly	Daily Composite	45	NR	Grab	
Ammonia, as Total N (July - September)	kg/d	7.382	22.416	Weekly	Daily Composite	NA	NR	NA	
Ammonia, as Total N (October)	mg/l	17	30	Weekly	Daily Composite	45	NR	Grab	
Ammonia, as Total N (October)	kg/d	12.57	22.416	Weekly	Daily Composite	NA	NR	NA	
BOD_5	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
BOD_5	kg/d	22.1	----	Weekly	Daily Composite	NA	NR	NA	
Cadmium, Total	mg/l	0.10	0.20	Weekly	Daily Composite	0.30	NR	Grab	*
Cadmium, Total	gr/d	20.4	40.8	Weekly	Daily Composite	NA	NR	NA	*
Chlorine, Free Residual	mg/l	----	----	Weekly	Grab Sample Average	NA	NR	NA	*
Chlorine, Total Residual	mg/l	0.46	0.92	Weekly	Grab Sample Average	1.29	NR	Grab	*
Chlorine, Total Residual	gr/d	----	----	Weekly	Grab Sample Average	NA	NR	NA	*
Chromium, Total	mg/l	1.0	2.0	Weekly	Daily Composite	3.0	NR	NA	

Cobalt, Total	mg/l	2.0	4.0	Quarterly	Daily Composite	6.0	NR	Grab	
Copper, Total	mg/l	0.40	1.0	Weekly	Daily Composite	1.5	NR	Grab	*
Copper, Total	g/d	66.8	134.0	Weekly	Daily Composite	NA	NR	NA	*
Cyanide, Amenable	mg/l	0.098	0.2	Weekly See Remarks	Grab Sample Average	0.3	NR	Grab	
Cyanide, Total	mg/l	0.65	1.2	Weekly See Remarks	Grab Sample Average	1.8	NR	Grab	
Cyanide, Total	kg/d	0.1607	0.3214	Weekly See Remarks	Grab Sample Average	NA	NR	NA	
Flow, Instantaneous	gpm	NA	NA	NR	NA	170	NR	Instantaneous	
Flow, Total	gpd	NA	200,000	Weekly	Daily Flow	NA	NR	NA	
Flow, Average & Maximum [1]	gpd	80,000	200,000	Continuous// Monthly	See Remarks	NA	NR	NA	
Fluoride, Free	mg/l	20.0	30.0	Weekly	Daily Composite	45.0	NR	Grab	
Fluoride, Total	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Iron, Total	mg/l	3.0	5.0	Weekly	Daily Composite	7.5	NR	Grab	
Lead, Total	mg/l	0.053	0.16	Weekly	Daily Composite	0.24	NR	Grab	*
Lead, Total	g/d	8.6	17.3	Weekly	Daily Composite	NA	NR	NA	*
Nickel, Total	mg/l	0.73	1.8	Weekly	Daily Composite	2.7	NR	Grab	*
Nickel, Total	g/d	129.9	260.5	Weekly	Daily Composite	NA	NR	NA	*
Nitrate as N	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Nitrate as N	lb/day	----	----	Weekly	Daily Composite	NA	NR	NA	
Nitrite as N	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Nitrite as N	lb/day	----	----	Weekly	Daily Composite	NA	NR	NA	
Organics, Total Toxic	mg/l	NA	NA	NR	NA	0.375	Quarterly	Grab	
pH,	S.U.	NA	NA	NR	NA	6.0 to 9.5	Weekly	Range During Sampling	
pH, Continuous	S.U.	NA	NA	NR	NA	6.0 to 9.5	Continuous // Monthly	Range During Month	
Phosphorus, Total	mg/l	----	----	Monthly	Daily Composite	NA	NR	NA	
Silver, Total	mg/l	0.1	0.43	Weekly	Daily Composite	0.64	NR	Grab	*
Silver, Total	g/d	25.0	50.0	Weekly	Daily Composite	NA	NR	NA	*
Solids, Total Suspended	mg/l	20.0	30.0	Weekly	Daily Composite	45.0	NR	Grab	
Surfactants	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Temperature	°F	NA	NA	NR	NA	----	Quarterly	Range During Composite	
Tin, Total	mg/l	2.0	4.0	Weekly	Daily Composite	6.0	NR	Grab	

Total Kjeldahl Nitrogen as N	mg/l	----	----	Weekly	Daily Composite	NA	NR	NA	
Total Kjeldahl Nitrogen as N	lb/day	----	----	Weekly	Daily Composite	NA	NR	NA	
Zinc, Total	mg/l	0.13	0.38	Weekly	Daily Composite	0.57	NR	Grab	*
Zinc, Total	g/d	182	365	Weekly	Daily Composite	NA	NR	NA	*

Table Footnotes and Remarks:

Footnotes:

1) For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow for each month.

2) The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

3) Minimum Level Test refers to Section 6 Paragraph (A)(3) of this permit.

4) Toxicity shall be reported in DMRs as an LC_{50} value.

Remarks:

1) Monitoring of cyanide, both amenable and total, shall be conducted only when the cyanide batch treatment system is discharging.

2) Limits contained in Table B shall be effective on the date occurring three (3) years and six (6) months after the day of permit issuance ("Final Compliance Date").

TABLE C

DISCHARGE SERIAL NUMBER: 002-B	MONITORING LOCATION: 1
WASTEWATER DESCRIPTION: Hexavalent Chromium Bearing Process Wastewater and Groundwater	
MONITORING LOCATION DESCRIPTION: Following chromium reduction, prior to mixing with any other waste stream	

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test[2]
		Average Monthly Limit	Maximum Daily Limit	Sample//Reporting Frequency[1]	Sample Type or Measurement to be Reported	Instantaneous Limit or Required Range	Sample// Reporting Frequency.[1]	Sample Type or Measurement to be Reported	
Chromium, Hexavalent	mg/l	0.1	0.2	Weekly	Grab Sample Average	0.3	NR	Grab	

Footnotes:

1) The first entry in this column is the `Sample Frequency'. If this entry is not followed by a `Reporting Frequency' and the `Sampling Frequency' is more frequent than Monthly then the `Reporting Frequency' is Monthly. If the `Sample Frequency' is specified as Monthly, or less frequent, then the `Reporting Frequency' is the same as the `Sample Frequency'.

2) Minimum Level Test refers to Section 6 Paragraph (A)(3) of this permit.

(1) All samples shall be comprised of only the wastewater described in this table. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.

(2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.

(3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the 40 CFR 136 unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

(3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Tables A and B. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Cadmium	0.5 ug/L
Chlorine, total residual	20.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Silver	2.0 ug/L
Zinc	10.0 ug/L

(4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.

(5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

(6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.

(b) Effluent samples shall not be dechlorinated, filtered, or, modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Section 5 Tables A and B shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, pH, specific conductance, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. If Total Residual Chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination.

(d) Tests for Aquatic Toxicity shall be initiated within 24 hours of sample collection.

(2) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old)

(3) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Pimephales promelas (1-14 days old with no more than 24-hours range in age).

(4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) Definitive (multi-concentration) testing, with LC50 as the endpoint, shall be conducted to determine compliance with limits on Aquatic Toxicity and monitoring conditions and shall

incorporate, at a minimum, the following effluent concentrations:

(i) For Aquatic Toxicity Limits expressed as LC50 values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%.

(ii) For Aquatic Toxicity Limits expressed as LC50 values between 15% and 33% and for monitoring only conditions: 100%, 50%, 25%, 12.5%, and 6.25%

(iii) For Aquatic Toxicity Limits expressed as LC50 values of 15% or less: 100%, 50%, 25%, 12.5%, 6.25%, and 3%

(b) For Aquatic Toxicity Limits and for monitoring only conditions, expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit, or 100% in the case of monitoring only conditions, as prescribed in section 22a-430-3(j)(7)(A)(I) of the Regulations of Connecticut State Agencies, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.

(c) Organisms shall not be fed during the tests.

(d) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.

(e) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as CaCO3 shall be used as dilution water in tests with freshwater organisms.

(5) Compliance with limits on Aquatic Toxicity shall be determined as follows:

(a) For limits expressed as a minimum LC50 value, compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC50 value for the test is greater than the Aquatic Toxicity Limit.

(C) The Permittee shall annually monitor the chronic toxicity of the DSN 001-1 in accordance with the following specifications.

(1) Chronic toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.

(2) Chronic toxicity testing shall be performed on the discharge in accordance with the test methodology established in "Short term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms" (EPA-821-R-02-013) as referenced in 40 CFR 136 for Cerio daphnia survival and reproduction and Fathead Minnow larval survival and growth.

(3) Chronic toxicity tests shall utilize a minimum of five effluent dilutions prepared using a dilution factor of 0.5 (100% effluent, 50% effluent, 25 % effluent, 12.5 % effluent, 6.25 % effluent, 0 % effluent).

(4) Naugatuck River water collected immediately upstream of the area influenced by the discharge shall be used as site water control (0% effluent) and dilution water in the toxicity tests.

(5) A laboratory water control consisting of synthetic freshwater prepared in accordance with EPA-821-R-02-013 at a hardness of 50±5 mg/l shall be included in the test protocol in addition to the site-water

control.

(6) Daily composite samples of the discharge and grab samples of the Naugatuck River for use as site water control and dilution water shall be collected on: day 0, for test solution renewal on day 1 and day 2 of the test; day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal on day 5, 6, and 7 of the test. Samples shall not be dechlorinated, pH or hardness adjusted, or chemically altered in any way.

(7) All samples of the discharge and the Naugatuck River water used in the chronic toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the following parameters:

pH	Copper (Total recoverable and dissolved)
Hardness	Nickel (Total recoverable and dissolved)
Alkalinity	Nitrogen, Ammonia (total as N)
Conductivity	Nitrogen, Nitrate (Total as N)
Chlorine, (Total residual)	Solids, Total Suspended
Aluminum	Zinc, (Total recoverable and dissolved)
Cyanide	Lead (Total recoverable and dissolved)
Fluoride	Chromium
Phosphorus	Silver
Iron	Surfactants

SECTION 7: LIMITATIONS FOR AQUATIC TOXICITY BASED ON ACTUAL FLOWS

(A) In lieu of demonstrating compliance with the specific Maximum Daily Toxicity Limits in Section 5 Tables A and B the Permittee may recalculate the IWC based on actual flows provided:

(1) the Permittee maintains an accurate record of measured discharge flows and hours of operation for all days on which a discharge occurs; and

(2) the total daily flow for any single operating day does not exceed the average of the daily flows for the thirty consecutive operating days prior to the sampling date by more than 25 per cent.

(B) The In stream Waste Concentration (IWC) shall be calculated as follows:

(1) The measured average daily flow in gallons per hour shall be tabulated for each of the prior 30 operating days and the arithmetic average for the 30 day period calculated.

(2) The IWC (in gallons per hour) specific for the thirty consecutive operating days prior to the sampling date shall be calculated by dividing the 30 day average hourly flow by the sum of the 30-day average flow and the zone of influence (ZOI, 96,042 gph) allocated to the discharge:

$$\text{IWC (\%)} = \frac{\text{30 day average hourly flow}}{\text{30 day average hourly flow + ZOI}} \times 100$$

(3) The alternative Maximum Daily Toxicity Limit shall be determined by the IWC calculated above:

(a) For IWC equal to or less than 5%, the LC50 value shall be greater than or equal to the IWC times 20.

(b) For IWC greater than 5%, and less than 15%, the NOAEL value shall be an NOAEL equal to the IWC times 6.7.

(c) For IWC equal to or greater than 15%, the NOAEL value shall be an NOAEL equal to 100%.

(d) Demonstration of compliance with these alternative Maximum Daily Limits shall be performed as specified in Section 6(B) of this permit.

(C) Compliance with the alternative Maximum Daily Toxicity Limits based on actual flows shall be determined as follows:

(1) For alternative limits expressed as a Minimum LC50 value in accordance with Section (7)(B)(3)(a) above, compliance shall be demonstrated when the LC50 value for a valid definitive Aquatic Toxicity Test, conducted pursuant to the requirements specified in Section (6)(B) of this permit, is greater than the alternative limit.

SECTION 8: REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) at the following address. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division (Attn: DMR Processing)
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC50 values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the 30 consecutive operating days prior to sample collection if compliance with a limit on Aquatic Toxicity is based on toxicity limits based on actual flows described in Section 7, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, CT 06106-5127

(C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, as scheduled, indicating "NO DISCHARGE". For those Permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

(D) For any table above that requires Total Toxic Organics (TTO) monitoring, the Permittee may, in lieu of analyzing for Total Toxic Organics, include a statement on the DMR, at the frequency required, certifying compliance with its Solvent Management Plan if such plan has been approved by the Commissioner in accordance with 22a-430-4(l) of the RCSA and by 40 CFR 433 (Metal Finishing). Such Solvent Management Plan must address all potential sources of solvents, including groundwater. If such approval has been granted and the reports include the compliance statement, the minimum frequency of sampling shall be reduced to annually in the month of July.

SECTION 9: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

(A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.

(B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Materials Management and Compliance Assurance (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.

(C) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

SECTION 10: COMPLIANCE SCHEDULE

(A) On or before eight (8) months 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 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.

(B) The Permittee shall achieve compliance with the effluent limitations contained in Section 5, Table B of this permit as soon as possible, but in no event later than the Final Compliance Date, in accordance with the following:

(1) Scope of Study. On or before nine (9) months after the date of issuance of this permit, the Permittee shall submit for the Commissioner's review and written approval a scope of study for the investigation of its ability to consistently achieve compliance with the effluent limitations contained in Section 5, Table B of this permit. Such scope shall include proposed sampling and analytical measures to supplement the aquatic toxicity monitoring required under Section 5, Table A of this permit during the investigation, and a schedule for conducting the investigation required by this paragraph and a date by which the report required by Section 10(B)(3) of this permit will be submitted to the Commissioner.

(2) Performance of Investigation. The Permittee shall perform the investigation and other actions specified in the approved scope of study and the approved schedule.

(3) Investigation Report and Implementation Plan. In accordance with the schedule approved by the Commissioner pursuant to Section 10(B)(1) of this permit but no later than one (1) year and six (6) months after the date of issuance of this permit, 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 10(B)(2) of this permit and which:

(a) compiles the aquatic toxicity monitoring data generated from investigations and monitoring performed and made publicly available by the Commissioner or performed by the Permittee after the date of issuance of this permit, and assesses the Permittee's ability to comply with the effluent limits contained in Section 5, Table B, including verification of whether the Permittee is achieving compliance with the Maximum Instantaneous Limits of Section 5, Table B. Should such investigation reveal that the Permittee is unable to meet aquatic toxicity limits, then the report shall include for the review and approval of the Commissioner a Toxicity Reduction Evaluation (TRE) performed in accordance with *Methods of Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (2nd Edition)*;

(b) evaluates alternative actions to achieve compliance with such limits including, but not limited to, pollutant source reduction, process changes/innovations, chemical substitutions, recycle and zero discharge systems, water conservation measures, and other internal and/or end-of-pipe treatment technologies;

(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 10(B)(6), 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.

(4) 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 10(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 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 9(B)(3) above.

(5) 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 two (2) years and six (6) months after the date of issuance of this permit**. 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.

(6) Evaluation of Approved Actions. On or before six (6) months from the completion of all approved remedial actions taken pursuant to Sections 10(B)(3) and 10(B)(5), the Permittee shall submit a report based on the study required under Section 10(B)(3)(g) summarizing the effectiveness of such remedial actions. After completing this study, and until the Final Compliance Date, the Permittee shall continue to evaluate the effectiveness of such remedial actions by sampling and analyzing this discharge for the parameters identified in Section 5, Table B on a bimonthly or other schedule more frequent than required by this permit and by reporting the results in the Permittee's DMR and ATMR in accordance with section 22a-430-3(j)(6) of RCSA and Sections 8 and 9 of this permit.

(C) Approvals. The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit in a complete and approvable form. If the Commissioner notified the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty (30) days of the Commissioner's notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.

(D) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this section of the permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this section of the permit means calendar day. Any document or action which is required by this section only of the permit, to be submitted, or performed, by a date which falls on, Saturday, Sunday, or, a legal Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or legal Connecticut or federal holiday.

(E) Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this section of the permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for

the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates that may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

(F) Notice to Commissioner of changes. Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the Commissioner.

(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:

Stephen Edwards
Department of Environmental Protection
Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on

Gina McCarthy
Commissioner

GM/SCE

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Whyco Technologies Inc. PAMS Company ID: 22843

PERMIT, ADDRESS, AND FACILITY DATA

Permit #: CT0001457 Application #: 200401538 Facility ID. #: 140-010

Mailing Address:	**Location Address:**
Street: 670 Waterbury Road	**Street:** 670 Waterbury Road
City: Thomaston **ST:** CT **Zip:** 06787	**City:** Thomaston **ST:** CT **Zip:** 06787
Contact Name: Barbara Lewis	**DMR Contact** Barbara Lewis
Phone No.: (860) 283-6153	**Phone No.:** (860) 283-6153

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR ___ 30 YEAR _____

TYPE New ___ Reissuance X Modification ____

CATEGORIZATION POINT (X) NON-POINT ( ) GIS # 6955

NPDES (X) PRETREAT () GROUND WATER(UIC) ( ) GROUND WATER (OTHER) ( )

NPDES MAJOR (MA) ___X__
NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) _____
NPDES or PRETREATMENT MINOR (MI) _____

PRETREAT SIGNIFICANT INDUS USER (SIU) _____
PRETREAT CATEGORICAL (CIU) _____

POLLUTION PREVENTION MANDATE ____ ENVIRONMENTAL EQUITY ISSUE ____

COMPLIANCE ISSUES

COMPLIANCE SCHEDULE YES X NO ____

POLLUTION PREVENTION ___ TREATMENT REQUIREMENT X WATER CONSERVATION X

WATER QUALITY REQUIREMENT X REMEDIATION ___ OTHER _____

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO___ YES X

The Department is currently drafting a Consent Order to address compliance issues.

OWNERSHIP CODE

Private _X_ Federal ___ State ___ Municipal (town only) ___ Other public ____

DEP STAFF ENGINEER Stephen Edwards

PERMIT FEES

Discharge Code	DSN	Annual Fee
101035Z	002	$8,175

FOR NPDES DISCHARGES

Drainage basin Code: 6900 Present/Future Water Quality Standard: C/B

NATURE OF BUSINESS GENERATING DISCHARGE

Whyco is a metal finishing job shop that conducts electroplating and other metal finishing operations ancillary to the electroplating process.

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 001 previously consisted of non-contact cooling water. The discharge was discontinued after a cooling tower was installed at the facility. Blowdown from the cooling tower is directed to DSN 002.

DSN 002 consists of metal finishing wastewaters, contaminated groundwater for remediation (not to exceed 1,400 gpd), and cooling tower blowdown. Individual metal finishing process waste streams are pretreated prior to mixing in the main treatment system. Pretreatment systems include acid/alkaline (nickel/zinc) treatment, ammonia removal, chromium reduction, cyanide destruct, and fluoride removal. Following any pretreatment systems, all wastewater passes through the main treatment system consisting of a chemical mixing tank, centrifugal rotary vacuum filter and a final pH adjustment tank. Wastewater may receive additional treatment from an optional ion exchange system as needed.

RESOURCES USED TO DRAFT PERMIT

_X_ Federal Effluent Limitation Guideline 40CFR 413 (Electroplating) and 433 (Metal Finishing)
name of category

__ Performance Standards

___ Federal Development Document _____
name of category

___ Treatability Manual

_X_ Department File Information

_X_ Connecticut Water Quality Standards

_X_ Anti-degradation Policy

___ Coastal Management Consistency Review Form

_X_ Other - Explain
- "Total Maximum Daily Load Analysis for the Upper Naugatuck River, Thomaston, CT", March 2005, CT DEP, with supporting documents.
- "A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound", December 2000, CT DEP and NYS DEC.
- "Water Quality Analysis of the Upper Naugatuck River", February 1988, CT DEP.

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

_X_ Best Available Technology (BAT):
DSN 002 (Tables A & B) - silver (maximum concentration)

___ Best Practicable Technology (BPT):

___ Best Conventional Technology (BCT):

_X_ Case-by-Case Determination using Best Professional Judgment (See Comments):
DSN 002 (Tables A & B) - aluminum, amenable cyanide (average concentration), copper (concentration limits), lead (concentration limits), fluoride (free and total), nickel (concentration limits), nitrate, nitrite, phosphorus, surfactants, TKN, and zinc (concentration limits)

_X_ Section 22a-430-4(s) of the Regulations of Connecticut State Agencies:
DSN 002 (Tables A & B) - amenable cyanide (maximum concentration limit), cadmium (average concentration), chromium (total), cyanide (total), iron, silver (average concentration), solids (total suspended), and tin
DSN 002B - chromium (hexavalent)

_X_ In order to meet in-stream water quality (See General Comments):
DSN 002 (Tables A & B) - ammonia, pH, and temperature
DSN 002 (Table B) - aquatic toxicity, BOD_5, copper (mass limits), lead (mass limits), nickel (mass limits), and zinc (mass limits)

_X_ Anti-degradation policy:
DSN 002 (Tables A & B) - cadmium (maximum concentration & average and maximum mass), chlorine (total residual), cobalt, cyanide (total, mass limits), organics (total toxic), and silver (mass limits)

DSN 002 (Table A) - aquatic toxicity, copper (mass limits), lead (mass limits), and zinc (mass limits)

GENERAL COMMENTS

In developing the permit's concentration limits, EPA Metal Finishing Categorical Limits (40 CFR Part 433) were compared with the limits contained in Section 22a-430-4(s)(2) of the Regulations of Connecticut State Agencies, historic limits (in accordance with the anti-degradation policy) and performance-based limits (only for copper, lead, nickel and zinc. See below for an explanation of how these performance-based limits were developed). The most stringent of these limits were thus incorporated into the permit.

Water quality based discharge limitations were calculated for inclusion in this permit for consistency with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Each parameter was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the zone of influence allocated to the facility where appropriate. The statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the limits. The most restrictive of the water quality limitations, aquatic life acute, aquatic life chronic, and human health, were compared with other limitations developed for this permit. The water quality-based limits were found to be less restrictive than these other limits and therefore were not included in the permit.

On August 17, 2005, EPA approved a Total Maximum Daily Load (TMDL) for the Upper Naugatuck River near Thomaston, CT. The TMDL reallocated the waste loads of four facilities in the study area (Thomaston POTW, Quality Rolling and Deburring, Whyco, Inc., and Summit Corporation) for whole effluent toxicity. The permit limits provided in Table B for toxicity are consistent with the requirements of this TMDL. Water quality-based mass-loading limits provided in Table B for copper, lead, nickel, and zinc were calculated according to the allocation methodology outlined in the June 7, 2006 interdepartmental memo regarding "Final Recommendations/Metals Allocations" and the corresponding August 29, 2006 interdepartmental memo regarding "Naugatuck TMDL – MOS Allocation". The permit contains an enforceable compliance schedule which requires the Permittee to comply with such limits on the date occurring three (3) years and six (6) months after the day of permit issuance.

Aquatic toxicity limits contained in Table A were calculated using the zone of influence (ZOI) from the previous permit, 484,704 gph. The limits contained in Table B were calculated using the ZOI from the Upper Naugatuck River TMDL, 96,042 gph. Water quality based limits for both tables were calculated using the 484,704 gph ZOI.

Water quality limits for BOD_5 were developed in accordance with the February 1988 report entitled *Water Quality Analysis of the Upper Naugatuck River* (approved by EPA on January 18, 1990). The report established an allowable loading of BOD_5 from Whyco's facility. For specifics of how this limit was developed, please refer to the November 8, 2002 and June 16, 2006 internal memos.

Water quality limits for ammonia were also calculated using the 1988 report entitled *Water Quality Analysis of the Upper Naugatuck River*. These limits are effective from July to September of each year. Limits for January to June and from November to December are performance-based limits. The performance-based limits contained in the previous permit were based on information from 1993. For this permit, the limits were recalculated using more recent data. The limits are based on the 95^{th} percentile and 99^{th} percentile of ammonia data submitted in DMRs from 2003 to 2006.

Concentration limits for copper, lead, nickel and zinc in both Tables A and B were calculated based on performance. The average monthly limit is the 95 percentile of DMR data from 1995 to 2005 and the maximum daily limit is the 99 percentile.

The monthly average amenable cyanide concentration limit contained in both tables was calculated in accordance with DEP policy (see August 28, 1992 memo) using the 40 CFR 433 amenable cyanide limit times the ratio of cyanide bearing wastewater to non-cyanide bearing wastewater. The limit was first calculated this way when the permit was modified on

November 16, 1995, after it was discovered that wastewater from the cyanide batch treatment system contains a substance that interferes with the analyses for amenable cyanide. A similar calculation was also performed with the maximum limit, but the limit contained in section 22a-430-4(s) is more restrictive.

Processes at Whyco Technologies generate wastewaters containing both BF_4 and free fluoride. While free fluoride may be treated with the addition of calcium, the boron-fluoride bond must first be broken before the fluoride may be removed. This bond has proven difficult to break using conventional treatment. Therefore, consistent with the previous permit, the limit for total fluoride contained in Section 22a-430-4(s) was applied to free fluoride, with monitoring only for total fluoride. For a summary of the chemistry and the investigation of treatment methods of BF_4, refer to Whyco Technologies' November 13, 1984 submittal.

Since the 1980s the Department has made it a priority to address low dissolved oxygen concentrations in the Long Island Sound. Regions of the Sound frequently failed to meet Connecticut's salt water dissolved oxygen standard of 6.0 mg/l, with the concentration of oxygen often observed as low as 1 mg/l. Investigations into this issue found that elevated concentrations of nitrogen in the Sound had contributed to frequent algae blooms, which had then consumed the available oxygen. To address this, the Department developed a TMDL to regulate nitrogen loading to Long Island Sound, approved by EPA in 2001. The Long Island Sound TMDL calls for a reduction in the amount of nitrogen discharged to the Long Island Sound primarily by requiring sewage treatment plants to install nitrogen reduction systems. However, the Department is also investigating industrial sources of nitrogen. The need for inclusion of nitrogen limitations in this permit was evaluated, however the relevant discharge data was found to be insufficient. Therefore a requirement for the Permittee to monitor for nitrate, nitrite and TKN was included in the permit to develop the data necessary for such an evaluation.

The Department forwarded a copy of the draft permit renewal to the Permittee on January 22, 2007. In a letter dated February 5, 2007, the Permittee requested additional time to review the draft permit. The Department granted the request in a letter dated February 27, 2007. The Permittee verbally informed the Department on May 17, 2007 that it did not have any comments on the draft permit. The Department notified the Permittee in an e-mail dated July 12, 2007 that it intended to public notice a tentative determination to reissue the permit in early August. The Permittee did not provide written comments to the Department on the draft permit prior to going to Public Notice.

The draft permit was revised as a result of pre-hearing negotiation discussions with Connecticut Fund for the Environment and the Permittee as follows:

- The draft permit's original five year compliance schedule was revised to require the Permittee to meet the final effluent limits contained in Table B within three years and six months of permit issuance. The revised schedule also requires the Permittee to supplement the aquatic toxicity monitoring required under Section 5, Table A of the permit with additional monitoring in order to determine compliance with instantaneous limits for aquatic toxicity and final effluent limits.

- The average daily flow of the discharge was reduced from 120,000 gpd to 80,000 gpd. The aquatic toxicity limits were revised accordingly.

- The authorization to treat up to 1,400 gpd of groundwater in the chromium reduction pretreatment system was added.

The permit was also revised by DEP to correct the following errors discovered during the pre-hearing review period:

- The references to the EPA document *"Short term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms"* in Section (6)(C) paragraphs (2) and (5) of the permit were corrected to read *(EPA-821-R-02-013).*

- Both total recoverable lead and dissolved lead were specified in the list of parameters to be monitored during chronic toxicity testing under Section (6)(C)(7) of the permit.

- Since the permit does not contain NOAEL aquatic toxicity limits, Section (7)(C)(2), that explained the method to calculate NOAEL limits using actual flows, was removed.

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF ADJUDICATIONS

IN THE MATTER OF : APPLICATION NO. 200401538

WHYCO FINISHING TECHNOLOGIES, LLC : DECEMBER [__], 2007

FINAL DECISION

The above-captioned application matter concerns renewal of the National Pollutant Discharge Elimination System Permit No. CT0001457 ("Permit") authorizing the applicant, Whyco Finishing Technologies, LLC, to discharge wastewaters into the Naugatuck River from its facility at 670 Waterbury Road in Thomaston, Connecticut. After the hearing officer's ruling granting party status to the intervenor, Connecticut Fund for the Environment, the parties in this matter submitted a Stipulation and Agreed Draft Decision seeking to resolve all issues in controversy by agreement ("Agreed Draft Decision"). Regs. Conn. State Agencies §§ 22a-3a-6(l)(3)(A). After the hearing, the hearing officer acted on and accepted the Agreed Draft Decision for my consideration.[1]

I find that the Agreed Draft Decision satisfactorily conveys the findings of fact and assessments of applicable law necessary to support this conclusion. I therefore adopt the parties' agreement as my Final Decision and authorize renewal of the Permit, as set forth in the Agreed Draft Decision (Attachment A).

~~/s/Gina McCarthy~~
Gina McCarthy
Commissioner

[1] See Regs. Conn. State Agencies §§ 22a-3a-6(d)(2)(I), 22a-3a-6(l)(3)(A)(ii), 22a-430-4(i). By written stipulation, the parties and the agency waived compliance with the proposed final decision requirements and the hearing officer did not issue a proposed final decision in this matter. Conn. Gen. Stat. § 4-179(d).

PARTY LIST

In the Matter of Whyco Finishing Technologies, LLC
Application No. 200401538

PARTY	*REPRESENTED BY*
APPLICANT	
Whyco Finishing Technologies, LLC 670 Waterbury Road Thomaston, CT 06787	Diane W. Whitney Pullman & Comley, LLC 90 State House Square Hartford, CT 06103 Fax: (860) 434-4370 Direct: (860) 424-4330
DEP	
Michelle Gore Melissa Blais Stephen Edwards Kevin Barrett Department of Environmental Protection Materials Management and Compliance Assurance, Permitting and Enforcement Division 79 Elm Street Hartford, CT 06106 Phone: (860) 424-3834 Fax: (860) 424-4074	
INTERVENOR	
Connecticut Fund for the Environment, Inc. Save the Sound:	Roger Reynolds, Senior Staff Attorney 1st Floor 205 Whitney Avenue New Haven, CT 06511-3725 Fax: (203) 787-0246