NPDES PERMIT

issued to

Sikorsky Aircraft Corporation
6900 Main Street
Stratford, Connecticut 06615-9129

Facility ID: 138-002 **Permit ID:** CT0001716

Receiving Stream: Housatonic River **Permit Expires:** September 25, 2011

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) Sikorsky Aircraft Corporation ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA that 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
(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.

(I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the Connecticut General Statutes).

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 sections 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.

"Annual" in the context of any sampling frequency found in Section 5, shall mean the sample must be collected in the month of June.

"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 wastewater discharged during an operating day.

"Dry weather conditions", for the purpose of monitoring under this permit, is defined as a climatic condition prior to which less than 0.1 inches of precipitation has fallen and there has been no significant snowmelt for a 24 hour period prior to commencement of sampling. Flow measurements taken on the day of or the day after a 0.1 inch or greater rain event or significant snowmelt shall not be used when calculating the monthly average and daily maximum flows.

“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 (CTC) in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) of RCSA demonstrating greater than 50% survival of test organisms in 100% (undiluted) effluent and 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 March, June, September, and December.

“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.

“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.

"Semi-Annual" in the context of a sampling frequency, means the sample must be collected in the months of June and December.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final determination and found that continuance of the existing system to treat DSN 001 will protect the waters of the state from pollution, continuance of existing discharges DSN 004, DSN 005 and DSN 006 will not cause pollution of the waters of the state, and installation of a new system for DSN 003 and DSN 007 will protect the waters of the state from pollution. The Commissioner requires the Permittee to submit, in accordance with Section 9 of this permit, plans and specifications of a new treatment system and such additional information as the Commissioner deems necessary to ensure DSN 003 and DSN 007 protect the waters of the state from pollution**.** The Commissioner’s decision is based on Application No. 200400911 for permit reissuance received on March 23, 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^{o}F, or in any case, raise the normal temperature of the receiving stream more than 4^{o}F.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with the tables below:

TABLE A

DISCHARGE SERIAL NUMBER: 001-1 | MONITORING LOCATION: 1

WASTEWATER DESCRIPTION: Non-Contact Cooling Water, Fire System Water, Ambient Air Condensate and Basement Dewatering Water

MONITORING LOCATION DESCRIPTION: At V-notched weir (Receiving stream: tidal creek of Housatonic River)

		FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test [3]
PARAMETER	**UNITS**	Average Monthly Limit	Maximum Daily Limit	Sample//Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported [5]	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Mysidopsis bahia NOAEL = 100%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	≥ 90%	NR	Grab	
Aquatic Toxicity, Cyprinodon variegates NOAEL = 100%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	≥ 90%	NR	Grab	
Aluminum, total	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Chlorine, Total Residual	ug/l	201	403	Quarterly	Grab Sample Average	604	NR	NA	X
Copper, Total	ug/l	78	157	Quarterly	Daily Composite	235	NR	NA	X
Flow, Day of Sampling	gpd	NA	250,000	Quarterly	Daily Flow	NA	NR	NA	
Flow, Average & Maximum[1]	gpd	150,000	250,000	Continuous// Monthly	See Remarks	NA	NR	NA	
Hours of Discharge	hr.	NA	-----	Quarterly	Total Hours	NA	NR	NA	
Iron, total	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Lead, Total	ug/l	33.2	66.5	Quarterly	Daily Composite	99.8	NR	NA	X
MBAS	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Oil and Grease, Total	mg/l	NA	5.0	Quarterly	Grab Sample Average	7.5	NR	NA	
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Quarterly	RDS	
Solids, Total Suspended	mg/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Temperature	deg F	NA	NA	NR	NA	-----	Quarterly	Instantaneous	
Zinc, Total	ug/l	332	665	Quarterly	Daily Composite	998	NR	NA	X

Table A Remarks:

[1] For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow under dry weather conditions for each month. If dry weather conditions do not occur during a given week, an asterisk shall be entered on the Discharge Monitoring Report for that week with a footnote indicating that dry weather conditions did not occur.

[2] 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.

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

[4] Samples shall be taken during dry weather conditions.

[5] Daily Composite, for this discharge, shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

[6] Toxicity limits are in percent survival.

TABLE B									
DISCHARGE SERIAL NUMBER: 003-1				MONITORING LOCATION: 1					
WASTEWATER DESCRIPTION: Non-Contact Cooling Water, Fire System Water, Ambient Air Condensate and Aircraft Spot Leak Test Water									
MONITORING LOCATION DESCRIPTION: At the end of the pipe as it enters the receiving stream.									
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 [4]	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Mysidopsis bahia NOAEL = 89%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	LC50 ≥ 89%	NR	Grab	
Aquatic Toxicity, Mysidopsis bahia Survival in 100%[6]	%	NA	≥ 50%	Quarterly	Daily Composite	NA	NR	Grab	
Aquatic Toxicity, Cyprinodon variegates NOAEL = 89%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	LC50 ≥ 89%	NR	Grab	
Aquatic Toxicity, Cyprinodon variegates Survival in 100%[6]	%	NA	≥ 50%	Quarterly	Daily Composite	NA	NR	Grab	
Aluminum, Total	ug/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Ammonia, as Nitrogen	ug/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Chlorine, Total Residual	ug/l	----	----	Quarterly	Grab Sample Average	NA	NR	NA	X
Chlorine, Total Residual[5]	ug/l	45.8	91.9	Quarterly	Grab Sample Average	138	NR	NA	X
Copper, Total	ug/l	----	----	Quarterly	Daily Composite	NA	NR	NA	X
Copper, Total[5]	ug/l	17.9	35.8	Quarterly	Daily Composite	53.7	NR	NA	X
Flow, Day of Sampling	gpd	NA	65,000	Quarterly	Daily Flow	NA	NR	NA	
Flow, Average & Maximum[1]	gpd	25,000	65,000	Daily/Monthly	See Remarks	NA	NR	NA	
Hours of Discharge	hr.	NA	-----	Quarterly	Total Hours	NA	NR	NA	
Lead, Total	ug/l	49.5	99.3	Quarterly	Daily Composite	149	NR	NA	X
Iron, Total	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	

Oil and Grease, Total	ug/l	NA	5,000	Quarterly	Grab Sample Average	7,500	NR	NA	
pH	S.U.	N A	NA	NR	NA	6.0 - 9.0	Quarterly	RDS	
Solids, Total Suspended	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Surfactants	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Temperature	deg F	NA	NA	NR	NA	-----	Quarterly	Instantaneous	
Zinc, Total	ug/l	-----	672	Quarterly	Daily Composite	1,008	NR	NA	X
Zinc, Total[5]	ug/l	335	672	Quarterly	Daily Composite	1,008	NR	NA	X

Table B Footnotes:

[1] For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow under dry weather conditions for each month. If dry weather conditions do not occur during a given week, an asterisk shall be entered on the Discharge Monitoring Report for that week with a footnote indicating that dry weather conditions did not occur.

[2] 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.

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

[4] Daily Composite, for this discharge, shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

[5] Effective 730 days from permit issuance.

[6] Toxicity limits are in percent survival.

TABLE C									
DISCHARGE SERIAL NUMBER: 004-1					MONITORING LOCATION: 1				
WASTEWATER DESCRIPTION: Non-Contact Cooling Water, Fire System Water, Ambient Air Condensate and Spill Containment Stormwater									
MONITORING LOCATION DESCRIPTION: At the end of the pipe as it enters the receiving stream.									
PARAMETER	**UNITS**	**FLOW/TIME BASED MONITORING**				**INSTANTANEOUS MONITORING**			Minimum Level Test [3]
		Average Monthly Limit	Maximum Daily Limit	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported [5]	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 57%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	LC50 ≥ 57%	NR	NA	
Aquatic Toxicity, Daphnia pulex Survival in 100%[6]	%	NA	≥ 50%	Quarterly	Daily Composite	NA	NR	NA	
Aquatic Toxicity, Pimephales promelas NOAEL = 57%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	LC50 ≥ 57%	NR	NA	
Aquatic Toxicity, Pimephales promelas Survival in 100%[6]	%	NA	≥ 50%	Quarterly	Daily Composite	NA	NR	NA	
Aluminum, Total	ug/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Chlorine, Total Residual	ug/l	106	213	Quarterly	Grab Sample Average	319	NR	NA	X
Copper, Total	ug/l	56	113	Quarterly	Daily Composite	169	NR	NA	X
Flow, Day of Sampling	gpd	NA	86,000	Quarterly	Daily Flow	NA	NR	NA	
Flow, Average & Maximum[1]	gpd	10,000	86,000	Continuous// Monthly	See Remarks	NA	NR	NA	
Hours of Discharge	hr.	NA	-----	Quarterly	Total Hours	NA	NR	NA	
Lead, Total	ug/l	11	23	Quarterly	Daily Composite	34	NR	NA	X
Iron, Total	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Oil and Grease, Total	ug/l	NA	5,000	Quarterly	Grab Sample Average	7,500	NR	NA	
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Quarterly	RDS	
Solids, Total Suspended	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Surfactants	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Temperature	deg F	NA	NA	NR	NA	-----	Quarterly	Instantaneous	

Zinc, Total	ug/l	1,000	2,000	Quarterly	Daily Composite	3,000	NR	NA	X

Table C Remarks:

[1] For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow under dry weather conditions for each month. If dry weather conditions do not occur during a given week, an asterisk shall be entered on the Discharge Monitoring Report for that week with a footnote indicating that dry weather conditions did not occur.

[2] 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.

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

[4] Samples shall be taken during dry weather conditions.

[5] Daily Composite, for this discharge, shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

[6] Toxicity limits are in percent survival.

TABLE D									
DISCHARGE SERIAL NUMBER: 005-1					MONITORING LOCATION: 1				
WASTEWATER DESCRIPTION: Fire System Water and Ambient Air Condensate									
MONITORING LOCATION DESCRIPTION: At the end of the pipe as it enters the receiving stream.									
		FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test [3]
PARAMETER	**UNITS**	Average Monthly Limit	Maximum Daily Limit	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported [5]	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	≥ 90%	NR	NA	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	≥ 90%	NR	NA	
Chlorine, Total Residual	ug/l	----	123	Quarterly	Grab Sample Average	185	NR	NA	X
Copper, Total	ug/l	----	48	Quarterly	Daily Composite	72	NR	NA	X
Flow, Average & Maximum[1]	gpd	NA	500	Daily/Monthly	See Remarks	NA	NR	NA	
Hours of Discharge	hr.	NA	-----	Quarterly	Total Hours	NA	NR	NA	
Lead, Total	ug/l	----	133	Quarterly	Daily Composite	200	NR	NA	X
Oil and Grease, Total	ug/l	NA	5,000	Quarterly	Grab Sample Average	7,500	NR	NA	
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Quarterly	RDS	
Temperature	deg F	NA	NA	NR	NA	-----	Quarterly	Instantaneous	
Zinc, Total	ug/l	----	902	Quarterly	Daily Composite	1,353	NR	NA	X

Table D Remarks:

[1] For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow under dry weather conditions for each month. If dry weather conditions do not occur during a given week, an asterisk shall be entered on the Discharge Monitoring Report for that week with a footnote indicating that dry weather conditions did not occur.

[2] 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.

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

[4] Samples shall be taken during dry weather conditions.

[5] Daily Composite, for this discharge, shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

[6] Toxicity limits are in percent survival.

TABLE E									
DISCHARGE SERIAL NUMBER: 006-1				MONITORING LOCATION: 1					
WASTEWATER DESCRIPTION: Fire System Water and Ambient Air Condensate									
MONITORING LOCATION DESCRIPTION: At the end of the pipe as it enters the receiving stream.									
		FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test [3]
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample//Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported [5]	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	≥ 90%	NR	NA	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%[6]	%	NA	≥ 90%	Quarterly	Daily Composite	≥ 90%	NR	NA	
Chlorine, Total Residual	ug/l	----	123	Quarterly	Grab Sample Average	185	NR	NA	X
Copper, Total	ug/l	----	48	Quarterly	Daily Composite	72	NR	NA	X
Flow, Average & Maximum[1]	gpd	NA	500	Daily/Monthly	See Remarks	NA	NR	NA	
Hours of Discharge	hr.	NA	----	Quarterly	Total Hours	NA	NR	NA	
Lead, Total	ug/l	----	133	Quarterly	Daily Composite	200	NR	NA	X
Oil and Grease, Total	ug/l	NA	5,000	Quarterly	Grab Sample Average	7,500	NR	NA	
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Quarterly	RDS	
Temperature	deg F	NA	NA	NR	NA	----	Quarterly	Instantaneous	
Zinc, Total	ug/l	----	902	Quarterly	Daily Composite	1,353	NR	NA	X

Table E Remarks:

[1] For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow under dry weather conditions for each month. If dry weather conditions do not occur during a given week, an asterisk shall be entered on the Discharge Monitoring Report for that week with a footnote indicating that dry weather conditions did not occur.

[2] 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.

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

[4] Samples shall be taken during dry weather conditions.

[5] Daily Composite, for this discharge, shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

[6] Toxicity limits are in percent survival.

TABLE F

DISCHARGE SERIAL NUMBER: 007-1 | MONITORING LOCATION: 1

WASTEWATER DESCRIPTION: Non-Contact Cooling Water, Fire System Water, Ambient Air Condensate, Ground Water and Spill Containment Stormwater

MONITORING LOCATION DESCRIPTION: At the end of the pipe as it enters the receiving stream.

		FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test [3]
PARAMETER	**UNITS**	Average Monthly Limit	Maximum Daily Limit	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported [5]	Instantaneous Limit or Required Range	Sample// Reporting Frequency [2 and 4]	Sample Type or Measurement to be Reported	
Aquatic Toxicity, Daphnia pulex LC_{50} [7]	%	NA	LC50 ≥ 66%	Quarterly	Daily Composite	LC50 ≥ 22 %	NR	NA	
Aquatic Toxicity, Pimephales promelas LC_{50} [7]	%	NA	LC50 ≥ 66%	Quarterly	Daily Composite	LC50 ≥ 22%	NR	NA	
Aluminum, Total	ug/l	NA	----	Quarterly	Daily Composite	NA	NR	NA	
Chlorine, Total Residual	ug/l	----	----	Quarterly	Grab Sample Average	NA	NR	NA	X
Chlorine, Total Residual[6]	ug/l	274	550	Quarterly	Grab Sample Average	825	NR	NA	X
Copper, Total	ug/l	146	293	Quarterly	Daily Composite	440	NR	NA	X
Flow, Total	gpd	NA	30,000	Quarterly	Daily Flow	NA	NR	NA	
Flow, Average & Maximum[1]	gpd	5,000	30,000	Daily/Monthly	See Remarks	NA	NR	NA	
Hours of Discharge	hr.	NA	-----	Quarterly	Total Hours	NA	NR	NA	
Lead, Total	ug/l	29.9	60.0	Quarterly	Daily Composite	90.0	NR	NA	X
Iron, Total	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Oil and Grease, Total	ug/l	NA	5,000	Quarterly	Grab Sample Average	7,500	NR	NA	
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Quarterly	RDS	
Solids, Total Suspended	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Surfactants	ug/l	NA	-----	Quarterly	Daily Composite	NA	NR	NA	
Temperature	deg F	NA	NA	NR	NA	-----	Quarterly	Instantaneous	
Zinc, Total	ug/l	985	1,980	Quarterly	Daily Composite	2,970	NR	NA	X

Table F Remarks:

[1] For this parameter the Permittee shall maintain at the facility a record of the Total Daily Flow for each day of discharge and shall report the Average Daily Flow and the Maximum Daily Flow under dry weather conditions for each month. If dry weather conditions do not occur during a given week, an asterisk shall be entered on the Discharge Monitoring Report for that week with a footnote indicating that dry weather conditions did not occur.

[2] 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.

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

[4] Samples shall be taken during dry weather conditions.

[5] Daily Composite, for this discharge, shall mean a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of up to four (4) hours and combined proportionally to flow, or a composite sample continuously collected over a full operating day proportionally to flow.

[6] Effective 730 days from permit issuance.

[7] Toxicity limits are in percent survival.

(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 Code of Federal Regulations, Part 136 of title 40 (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. 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
Chlorine, total residual	20.0 ug/L
Copper	5.0 ug/L
Lead	5.0 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, salinity, 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. Salinity shall be measured in each test concentration at the beginning of the test and at test termination.

(ii) For tests with saltwater organisms that require salinity adjustment of the effluent, chemical analyses shall be conducted on an aliquot of the effluent sample collected for Aquatic Toxicity testing and on an aliquot of the effluent following salinity adjustment. Both sets of results shall be reported on the Aquatic Toxicity Monitoring Report (ATMR).

(d) Chemical analyses of the parameters identified in Section 5 Tables C, D, E and F 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.

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

(2) When monitoring for Aquatic Toxicity to determine compliance with the permit limits contained in Tables C, D, E and F:
   (a) Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old); and
   (b) 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).

(3) When monitoring for Aquatic Toxicity to determine compliance with the permit limits contained in Tables A and B.
   (a) Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Mysidopsis bahia (1-5 days old with no more than 24-hours range in age); and
   (b) Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Cyprinodon variegatus (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.

   (f) Aquatic toxicity tests with saltwater organisms shall be conducted at a salinity of parts per 20 thousand, plus or minus 2 parts per thousand.

      (i) Sodium lauryl sulfate or sodium dodecyl sulfate shall be used as the reference toxicant.

(ii) Synthetic seawater for use as dilution water or controls shall be prepared with deionized water and artificial sea salts as described in EPA/821-R-02-012.

(iii) If the salinity of the source water is more that 5 parts per thousand higher, or lower than the culture water used for rearing the organisms, a second set of controls matching the salinity of the culture water shall be added to the test series. Test validity shall be determined using the controls adjusted to match the source water salinity.

(iv) Salinity adjustment that may be required in tests with saltwater organisms shall utilize the minimum amount of synthetic hypersaline brine (not to exceed 100 parts per thousand) or dilute (2 parts per thousand) synthetic seawater necessary to achieve the required salinity.

(v) The actual effluent concentrations in definitive tests with saltwater organisms shall be used in calculating test results.

(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.

(b) For limits expressed as an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is greater than 50% survival in the undiluted effluent and 90% or greater survival in the effluent at the specified CTC.

SECTION 7: 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
Connecticut Department of Environmental Protection
Water Permitting and Enforcement Division
Attn: DMR Processing
79 Elm Street
Hartford, CT 06106-5127

(B) Complete an 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:

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.

SECTION 8: 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 Water Protection and Land Reuse (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 9: COMPLIANCE SCHEDULE

(A) The Permittee shall achieve compliance with the final total residual chlorine and total copper effluent limitations contained in Section 5, Tables B and F as soon as possible but in no event later than 730 days after the date of issuance of this permit in accordance with the following:

1) The Permittee shall notify the Commissioner in writing of the identity of any consultants retained to prepare the documents and implement or oversee the actions required by this section of the permit. Permittee shall notify the Commissioner in writing within ten days after retaining any consultant other than one originally identified under this paragraph. 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 days after a request for such a description. Nothing in this paragraph shall preclude the Commissioner from finding a previously acceptable consultant unacceptable.

2) On or before 365 days 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 and evaluates alternative actions which may be taken by the Permittee to achieve compliance with the limitations in Section 5, Tables B and F, of this permit. Such report shall:

(a) evaluate alternative actions to achieve compliance with Section 5 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;

(b) state in detail the most expeditious schedule for performing each alternative;

(c) list 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 or 22a-430 of the Connecticut General Statutes;

(d) propose a preferred alternative or combination of alternatives with supporting justification; and

(e) propose 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.

3) 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 730 days after the date of issuance of this permit. Within fifteen days after completing such actions, the Permittee shall certify to the Commissioner in writing that the actions have been completed as approved.

(B) The Permittee shall submit to the Commissioner semi-annual status reports beginning sixty days after the date of approval of the report referenced in Section 10(A)(2) above. Status reports shall include, but not be limited to, a summary of all effluent monitoring data collected by the Permittee during the previous 180 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 paragraph (A)(2) of this section.

(C) 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 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 Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or 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
79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on 9/26/06.

/s/GINA MCCARTHY
Gina McCarthy
Commissioner

GM/SCE

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Sikorsky Aircraft Corporation PAMS Company ID: 95029

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0001716 APPLICATION #: 200400911 FACILITY ID. 138-022

Mailing Address:						Location Address:					
Street:	6900 Main Street					Street:	6900 Main Street				
City:	Stratford	ST:	CT	Zip:	06615-9129	City:	Stratford	ST:	CT	Zip:	06615-9129
Contact Name:	Mary Chisarik					DMR Contact	Hillary Martin				
Phone No.:	(203) 386 - 3423					Phone No.:	(203) 386 - 3763				

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR ___ 30 YEAR _____

TYPE New _ Reissuance X Modification ___

CATEGORIZATION POINT (X) NON-POINT ( ) GIS # 316

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

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

PRETREAT SIGNIFICANT INDUS USER (SIU) _____
PRETREAT CATEGORICAL (CIU) _____
Note: If it's a CIU then check off SIU

POLLUTION PREVENTION MANDATE _ ENVIRONMENTAL EQUITY ISSUE ____

COMPLIANCE ISSUES

Compliance Schedule Yes X No__

Pollution Prevention ___ Treatment Requirement____Water Conservation____

Water Quality Requirement X Remediation __ Other _____

Is The Permittee Subject To A Pending Enforcement Action? No X Yes __

OWNERSHIP CODE

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

DEP STAFF ENGINEER: Stephen Edwards

PERMIT FEES

Discharge Code	Category	DSN	Annual Fee
102000c	Non-Contact Cooling Water	001	$14,700.00
1170000	Ambient Air Condensate	001	$4,087.50
117000n	Fire System Wastewater	001	NA
1090000	Basement Dewatering	001	$4,087.50
102000n	Non-Contact Cooling Water	003	NA
117000n	Ambient Air Condensate	003	NA
117000n	Fire System Wastewater	003	NA
121000a	Aircraft Spot Test Leak	003	$525.00
102000n	Non-Contact Cooling Water	004	NA
117000n	Ambient Air Condensate	004	NA
117000n	Fire System Wastewater	004	NA
1080000	Spill Containment Stormwater	004	$2,662.5
117000n	Ambient Air Condensate	005	NA
117000n	Fire System Wastewater	005	NA
117000n	Ambient Air Condensate	006	NA
117000n	Fire System Wastewater	006	NA
102000n	Non-Contact Cooling Water	007	NA
117000n	Ambient Air Condensate	007	NA
117000n	Fire System Wastewater	007	NA
109000n	Groundwater	007	NA
108000n	Spill Containment Stormwater	007	NA
		Total	**$26,062.50**

FOR NPDES DISCHARGES

DSNs 001 and 003: Unnamed tidal tributary to the Housatonic
Drainage basin Code: 6000 Present/Future Water Quality Standard: SC/SB

DSNs 004, 005, 006 and 007: Unnamed tidal tributary to the Far Mill River
Drainage basin Code: 6025 Present/Future Water Quality Standard: B

NATURE OF BUSINESS GENERATING DISCHARGE

Sikorsky Aircraft Corporation manufactures, assembles and maintains helicopters and their spare parts.

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 001 consists of non-contact cooling water, fire system water, ambient air condensate and basement dewatering ground water with an average monthly flow of 150,000 gpd and a maximum daily flow of 250,000 gpd. DSN 001 is dechlorinated to meet chlorine limits.

DSN 003 is made up of an average monthly flow of 25,000 gpd with a maximum daily flow of 65,000 gpd of non-contact cooling water, fire system water, ambient air condensate and aircraft spot leak test water.

DSN 004 has an average monthly flow of 10,000 gpd with a maximum daily flow of 86,000 gpd of non-contact cooling water, fire system water, ambient air condensate and spill containment stormwater.

DSN 005 consists of fire system water and ambient air condensate.

DSN 006 consists of fire system water and ambient air condensate.

DSN 007 consists of non-contact cooling water, fire system water, ambient air condensate, ground water and spill containment stormwater with an average monthly flow of 5,000 gpd and a maximum daily flow of 30,000 gpd.

RESOURCES USED TO DRAFT PERMIT

___ Federal Effluent Limitation Guideline_____
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

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

___ Pretreatment Standards for Existing Sources (PSES)

___ Pretreatment Standards for New Sources (PSNS)

___ New Source Performance Standards (NSPS)

___ Best Available Technology (BAT)

___ Best Practicable Technology (BPT)

___ Best Conventional Technology (BCT)

___ Best Professional Judgment (See Other Comments)

___ Secondary Treatment

_X_ Case-by-Case Determination (See Other Comments)
DSN 001 - pH and temperature monitoring
DSN 003 - oil & grease and pH
DSN 004 - oil & grease, pH and zinc
DSN 005 - pH
DSN 006 - pH
DSN 007 - oil & grease and pH

_X_ Section 22a-430-4(s) of the Regulations of Connecticut State Agencies

_X_ In order to meet in-stream water quality (See General Comments)
DSN 001- chlorine (total residual) and copper
DSN 003 - aquatic toxicity, chlorine (total residual), copper, lead and zinc
DSN 004 - aquatic toxicity, chlorine (total residual), copper, and lead
DSN 005 - aquatic toxicity, chlorine (total residual), copper, lead, and zinc
DSN 006 - aquatic toxicity, chlorine (total residual), copper, lead, and zinc
DSN 007 - aquatic toxicity, chlorine (total residual), copper, lead, and zinc

_X_ Anti-degradation policy (see Other Comments)
DSN 001 - aquatic toxicity, lead, oil & grease, and zinc

GENERAL COMMENTS

Water quality based discharge limitations were included in this permit for DSNs 001, 003, 004 and 007 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 (ZOI) 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 was applied.

OTHER COMMENTS

Water quality limits for DSNs 001 and 003 were calculated using water quality criteria for a salt water environment. Water quality limits for DSNs 004, 005, 006 and 007 were calculated using water quality criteria for a fresh water environment.

The permitted average monthly flow limit for DSN 001 decreased from 700,000 gpd under the previous permit to

150,000 gpd when the permit was modified on February 16, 2005. Water quality limits calculated using the reduced flow resulted in higher concentration limits. However, the Permittee has demonstrated the ability to meet existing aquatic toxicity, lead, oil & grease, and zinc limits. Therefore, in accordance with Section 22a-430-4(l)(4)(A)(xxiii) of the RCSA, the limits for these parameters remained the same.

Review of aerial photos revealed that DSNs 001 and 003 discharge to the same unnamed tributary of the Housatonic River. It had been previously thought that the two discharges were directed to separate tributaries. DSN 001 was allocated a ZOI of 205,000 gph when this permit was modified on February 16, 2005. This is the total dilution available in the unnamed tributary according to a dye study performed by the Permittee during the previous permit reissuance. Therefore, 6,732 gph of DSN 001's ZOI was reassigned to DSN 003 to reflect actual conditions in the tributary. Based on DMR data, this will not effect the Permittee's ability to meet permit limits.

The unnamed tributary of the Far Mill River that DSNs 004, 005, 006, and 007 discharge to has 13,464 gph available to allocate to ZOIs. DEP concluded DSN 007 required an allocation of 6,128 gph to pass WQ and toxicity limits. DSN 004 was allocated 4,488 gph based on staff observations and aerial photos.

During the review of the application to reissue this permit, DSNs 005 and 006 were not discharging and all waste streams that contributed to these discharges were thought to have been eliminated. However, it is possible that a discharge of condensate could still occur, especially in the warmer months. Hence, there was inadequate data to properly evaluate these discharges. Water quality limits for these discharges were conservatively calculated assuming a 10:1 dilution of the discharge in the river and toxicity limits were set at NOAEL = 100%. At a 10:1 dilution, the combined ZOI of these discharges would be 374 gph.

The pH limits contained in this permit are similar to those given to other like discharges to class B streams.

Oil and grease limits for DSNs 003 through 007 were based on the limit given to DSN 001.

Effluent limitations are not required for the following parameters by federal categorical regulation or based on water quality. However, based on analytical data and discharge descriptions, they have a potential to be in the discharge and warranted monitoring:
DSN 001 - temperature
DSN 003 - aluminum, ammonia, iron, solids (total suspended), surfactants, and temperature
DSN 004 - aluminum, iron, solids (total suspended), surfactants, and temperature
DSN 005 - temperature
DSN 006 - temperature
DSN 007 - aluminum, iron, solids (total suspended), surfactants, and temperature

In December of 2005, DSN 002 of this permit was relocated to the Stratford sanitary sewer as DSN 201 of Permit No. SP0000551. This discharge consists of treated metal finishing wastewater and had been the only discharge covered under this permit that was subject to Federal Categorical discharge limits. An *NPDES Permit Rating Work Sheet* was completed for this permit without DSN 002 and the permit scored 53. Since the work sheet produced a score below 80, this permit was down graded from a major to a minor with this reissuance. Note, with DSN 002, the permit had previously scored 98.

This permit introduces a number of new water quality based limits that Permittee is unable to consistently meet. Specifically, DSN 003 fails to meet total residual chorine, total copper and total zinc and DSN 007 fails to meet the total residual chlorine. Therefore, Section 9 of this permit contains a three-year schedule for the Permittee to develop, submit and implement plans to meet these new limits, at which time the final limits will go into effect.