NPDES PERMIT

issued to

Rogers Corporation
P.O Box 188
One Technology Drive
Rogers, CT 06263-0188

Location Address:
245 Woodstock Road
Woodstock, CT 06281-1815

Facility ID: 169-005

Permit ID: CT0021504

Receiving Stream: May Brook

Permit Expires: February 22, 2014

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) **Rogers Corporation** ("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
(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 section of the 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, 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.

"Annual" in the context of a sampling frequency, means the sample must be collected when the discharge occurs between July to September.

"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.

"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 ".

"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.

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

"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.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final decision and found that continuance of the existing discharge will not cause pollution of the waters of the state. The Commissioner’s decision is based on Application No. 199900361 for permit reissuance, received on January 26, 1999 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 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 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 table below:

Table A

Discharge Serial Number: 001-1 | **Monitoring Location: 1**

Wastewater Description: Fire pump test wastewaters

Monitoring Location Description: Prior to discharging into the fire pond located at southeast end of the site

Allocated Zone of Influence (ZOI): 4, 308 gph | **In stream waste concentration (IWC): 97.1 %**

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	
Aquatic Toxicity, Daphnia pulex NOAEL=100%[3]	%	NA	NA	NR	NA	≥ 90	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL=100%[3]	%	NA	NA	NR	NA	≥ 90	Annual	Grab	
Copper, Total[4]	mg/l	NA	NA	NR	NA	0.012	Annual	Grab	*
Flow, Instantaneous	gpm	NA	NA	NR	NA	----	Annual	Instantaneous	
Flow, Day of Sampling	gpd	NA	216,000	Annual	Total Flow	NA	NR	NA	
Iron, Total[4]	mg/l	NA	NA	NR	NA	1.21	Annual	Grab	
Lead, Total[4]	mg/l	NA	NA	NR	NA	0.015	Annual	Grab	*
Nitrogen, Ammonia (total as N) [4]	mg/l	NA	NA	NR	NA	---	Annual	Grab	*
Oil and Grease, Total[4]	mg/l	NA	NA	NR	NA	20.0	Annual	Grab	
pH, Day of Sampling[5]	S.U.	NA	NA	NR	NA	6.0 – 9.0[5]	Annual	Grab	
Total Suspended Solids[4]	mg/l	NA	NA	NR	NA	---	Annual	Grab	
Zinc, Total[4]	mg/l	NA	NA	NR	NA	0.033	Annual	Grab	*

Table A Footnotes and Remarks:

Footnotes:

[1]The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' 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'.

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

[3] The results of the toxicity tests are recorded in % survival. The permittee shall report the % survival result on the DMR based on criteria in Section 6(B) of this permit.

[4] Indicates that testing for this parameter shall be performed on the same sample used for aquatic toxicity testing.

[5] The Permittee shall maintain at the facility a record of the pH of the fire pond water (pH influent) for each day of discharge and shall report with the DMR submittal the pH influent in the event that on the day of sampling the pH influent is outside the allowable pH range of 6-9, then the pH of the discharge shall be within +/- 0.5 S.U of the influent (pond water).

Remarks:

The Permittee shall clean out the impeller of the pump and the sump in which it rests before the Fire Pump Test Water is performed.

(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 Table A. 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
Copper	5.0 ug/L
Lead	5.0 ug/L
Nitrogen, Ammonia	20.0 ug/L
Zinc	20.0 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) 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) 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 Table A shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(d) 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. 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) 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) For Aquatic Toxicity Limits 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 to 100%, as prescribed in section 22a-430-3(j)(7)(A)(i) of the Regulations of Connecticut State Agencies.

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

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

(d) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as $CaCO_3$ 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 an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is 90% or greater survival in the undiluted effluent.

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
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, LC_{50} and NOAEL for survival, growth and/or reproduction, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the day of sample collection 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.

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.

This permit is hereby issued on 2/23/2009

/S/GINA MCCARTHY
COMMISSIONER

GM/EH

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Rogers Corporation ***PAMS Company ID: 22226***

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0021504 ***APPLICATION #: 199900361*** ***FACILITY ID 169-005***

Mailing Address:	***Location Address:***
Street: One Technology Drive	***Street: 245 Woodstock Road***
City: Rogers ST: CT Zip: 06263-0188	***City: Woodstock ST: CT Zip: 06281-1815***
Contact Name: Michal Werbecki	***DMR Contact: Michal Werbecki***
Phone No.: (860) 779-4765	***Phone No.: (860) 779-4765***

PERMIT INFORMATION

DURATION 5 YEAR X 10 YEAR 30 YEAR

TYPE New Reissuance X Modification

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

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)

POLLUTION PREVENTION MANDATE ***ENVIRONMENTAL EQUITY ISSUE***

COMPLIANCE ISSUES

COMPLIANCE SCHEDULE YES NO X (If yes check off what it is in relation to.)

POLLUTION PREVENTION TREATMENT REQUIREMENT WATER CONSERVATION

WATER QUALITY REQUIREMENT 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 Enna Herrera

PERMIT FEES

Discharge Code	*DSN Number*	*Annual Fee*
121000a (Approximation)	*001-1*	*$ 525.00*

FOR NPDES DISCHARGES

Drainage basin Code: 3708 ***Present/Future Water Quality Standard: B/AA***

NATURE OF BUSINESS GENERATING DISCHARGE

Annual fire suppression system testing

PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 001-1: No treatment is required.

RESOURCES USED TO DRAFT PERMIT

__ *Federal Effluent Limitation Guideline 40 CFR* (*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

_X_ *Case-by-Case Determination and Best Professional Judgment (See General Comments)*
DSN 001-1: ammonia nitrogen, total oil and grease, and total suspended solids.

_X_ *In order to meet in-stream water quality (See General Comments)*
DSN 001-1: iron, copper, pH, lead, and zinc.

GENERAL COMMENTS

The need to include water quality based discharge limitations in this permit was evaluated to be consistent 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 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 these limits. The calculated limits were then compared to the available effluent data. A comparison of the calculated limits to the effluent data suggests a statistical probability of exceeding such limits. Therefore, water quality based limits were included in this permit for copper, iron, lead, and zinc.

OTHER COMMENTS

A case-by-case determination using best professional judgment was used to develop limits and monitoring requirements for ammonia nitrogen, total oil and grease, and total suspended solids in this permit renewal. Section 22a-430-4(s) of the RCSA was used as guidance in establishing an instantaneous limit for total oil and grease. Best practicable control technology (BPT), best conventional pollutant control technology (BCT), and 40 CFR 133 Secondary Treatment Regulations were used as guidance in establishing limitations for pH.

A review of the Rogers Corporation's DMR effluent performance data in the last five years revealed that they are able to meet all permit limits proposed in this permit renewal.

It should be noted that city water is not used in this system. The fire pump test water is provided by an on-site fire pond that is fed by May Brook. Based on the DEP staff review of the Rogers Corporation's DMRs for the last five (5) years, effluent results for total residual chlorine and nickel revealed that these parameters have been consistently below detection levels. Total chlorine residual is not expected to be present in the fire pump test water. This review also revealed that total dissolved solids were detected only at low levels. As such, it is the DEP staff's recommendation to eliminate monitoring requirements for nickel, total residual chlorine, and total dissolved solids in this permit renewal.