

**STATE PERMIT MODIFICATION**

**issued to**

**Permittee:**

3M Purification Inc.  
32 River Road  
Stafford Springs, CT 06076-1500

**Location Address:**

32 River Road  
Stafford Springs, CT 06076-1500

Attention: Judith P Fera, EHS Supervisor

**Facility ID:** 134-002

**Permit ID:** SP0000060

**Permit Modification Expires:** **December 27, 2012**

This permit modification is issued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), section 22a-430-4(p)(5) of the Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and a modified Memorandum of Agreement (MOA) dated June 3, 1981, by the Administrator of the United States Environmental Protection Agency which authorizes the State of Connecticut to administer a Pretreatment Program pursuant to 40 CFR Part 403.

The Commissioner of Energy and Environmental Protection ("the Commissioner") has made a final determination on this permit modification and found that the continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 201200132 for permit modification received on January 13, 2012 and the administrative record established in the processing of that application.

3M Purification Inc., ("Permittee"), shall comply with all conditions of Permit No. SP0000060 issued on December 28, 2007 with the following modification:

1. Table A is hereby revised in Section 4(A) of this permit to reflect the addition of wastewaters from the zeta carbon process and superseded with the respective table attached hereto.
2. Section 5 of the Permit is hereby replaced and superseded with Section 5 attached hereto, which includes updated permit format language regarding NetDMR.
3. Section 7 of the Permit is hereby replaced and superseded with Section 7 attached hereto, which incorporates Reporting and Significant Noncompliance Requirements.

The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit modification, Permit No. SP0000060, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

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

This permit modification becomes effective on the date of signature.

All other terms and conditions of Permit No. SP0000060 issued on December 28, 2007 shall continue in full force and effect.

This permit modification is hereby issued on May 22, 2012

/s/MACKY MCCLEARY  
Macky McCleary  
Deputy Commissioner

MM/EW  
cc: Ed Finger, WPED- Enforcement  
Town of Stafford Springs POTW  
Sent RRR

**“SECTION 5: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES AND REPORTING REQUIREMENTS**

- (A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved by the Environmental Protection Agency pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 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.
- (B) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.
- (C) The results of chemical analysis 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 at the following address. Except for continuous monitoring, any monitoring required more frequently than monthly shall be reported on an attachment to the DMR, and any additional monitoring conducted in accordance with 40 CFR 136 or other methods approved by the Commissioner shall also be included on the DMR, or as an attachment, if necessary. 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 taken.

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

- (D) 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 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.
- (E) NetDMR Reporting Requirements
  - 1. Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

- a. Submittal of *NetDMR Subscriber Agreement*

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at [dep.netdmr@ct.gov](mailto:dep.netdmr@ct.gov) and initiate the NetDMR subscription process for electronic submission of Discharge Monitoring Report (DMR) information. Information on NetDMR is available on the Department's website at [www.ct.gov/deep/netdmr](http://www.ct.gov/deep/netdmr). On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the *Connecticut DEEP NetDMR Subscriber Agreement* to the Department.

b. Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement of Section 5(C) of this permit.

DMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. All reports required under the permit, including any monitoring conducted more frequently than monthly or any additional monitoring conducted in accordance with 40 CFR 136, shall be submitted to the Department as an electronic attachment to the DMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to the Department. The Permittee shall also electronically file any written report of non-compliance described in Section 6 of this permit as an attachment in NetDMR. NetDMR is accessed from: <http://www.epa.gov/netdmr>.

c. Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the Commissioner may approve the submission of DMRs and other required reports in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing DMRs and other reports using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at [dep.netdmr@ct.gov](mailto:dep.netdmr@ct.gov):

**Attn: NetDMR Coordinator**  
**Connecticut Department of Energy and Environmental Protection**  
**79 Elm Street**  
**Hartford, CT 06106-5127**

- (F) Copies of all DMRs shall be submitted concurrently to the local Water Pollution Control Authority ("WPCA") involved in the treatment and collection of the permitted discharge."

**"SECTION 7: COMPLIANCE CONDITIONS**

In accordance with 40 CFR §403.8(f)(2)(viii), the Commissioner may provide public notification, in a newspaper of general circulation in the area of the respective POTW, of permittees that at any time in the previous twelve months were in significant noncompliance with the provisions of this permit. For the purposes of this provision, a permittee that is a Significant Industrial User is in significant noncompliance if its violation(s) meet(s) one or more of the following criteria:

- **Chronic violations:** Those in which sixty-six (66%) percent or more of all measurements taken for the same pollutant parameter during a six-month period exceed (by any magnitude) the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s).
- **Technical Review Criteria violations:** Those in which thirty-three (33%) or more of all of the measurements taken for the same pollutant parameter during a six-month period equal or exceed the Average Monthly, Maximum Daily, or Maximum Instantaneous Limit(s) multiplied by 1.4 for BOD, TSS, fats, oil, and grease, or

1.2 for all other pollutants except pH.

- **Monitoring Reports:** Failure to provide, within 45 days after the due date, required reports such as DMRs.
- **Compliance Schedule:** Failure to meet within 90 days after the schedule date, a compliance schedule milestone contained in or linked to a respective permit for starting construction, completing construction, or attaining final compliance.
- **Noncompliance Reporting:** Failure to accurately report noncompliance in accordance with provisions identified in Section 6 of this permit.
- **Discretionary:** Any other violation of an effluent limit that the Department determines has caused, alone or in combination with other discharges, a violation of the POTW's NPDES permit, inhibition or disruption of the POTW, its treatment processes or operations, or its sludge processes, use or disposal.
- **Imminent Endangerment:** Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment, or has resulted in the Department's exercise of its emergency authority under 40 CFR §403.8(f)(1)(vi)(B) to halt or prevent such a discharge.
- **BMPs:** Any other violation or group of violations, which may include a violation of Best Management Practices, which the Department determines will adversely affect the operation or implementation of the pretreatment program.”

**Table A**

**Discharge Serial Number: 201-1**

**Monitoring Location: 1**

**Wastewater Description:** Wastewater associated with fiber filter manufacturing operations, HCL washing of diatomaceous earth, **zeta carbon process**, alkali cleaning of stainless steel screens, laboratory activities, recycled non-contact cooling water, filtered water overflow, and reverse osmosis (R.O.) reject water.

**Monitoring Location Description:** Effluent wet well

**Discharge is to:** The Town of Stafford Springs Water Pollution Control Facility

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING		
		Average Monthly Limit	Maximum Daily Limit	Sample/ Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency <sup>2</sup>	Sample Type or measurement to be reported
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/l	---	---	Monthly	Daily Composite	NA	NR	Grab
1,3 Dichloro-2-propanol	mg/l	---	---	Annually	Grab Sample Average	NA	NR	Grab
Copper, Total	mg/l	0.5	1.0	Weekly	Daily Composite	1.5	NR	Grab
Epichlorohydrin	mg/l	---	---	Annually	Grab Sample Average	NA	NR	Grab
Formaldehyde <sup>3</sup>	mg/l	---	32.5	Weekly	Daily Composite	45.8	NR	Grab
Flow Rate, (Average Daily) <sup>1</sup>	gpd	400,000	NA	Weekly	Total Flow	NA	NR	NA
Flow, Maximum During 24 hr Period <sup>1</sup>	gpd	NA	500,000	Weekly	Total Flow	NA	NR	NA
Flow Total (Day of Sampling)	gpd	NA	500,000	Weekly	Total Flow	NA	NR	NA
Lead, Total	mg/l	0.1	0.5	Weekly	Daily Composite	0.75	NR	Grab
pH, Day of Sampling	S.U.	NA	NA	NR	NA	6.0 – 10.0	Weekly	RDS
pH, Minimum	S.U.	NA	NA	NR	NA	6.0	Continuous	Continuous
pH, Maximum	S.U.	NA	NA	NR	NA	10.0	Continuous	Continuous
Phenols, Total	mg/l	5.0	10.0	Monthly	Daily Composite	10.0	NR	Grab
Total Suspended Solids	mg/l	---	---	Weekly	Daily Composite	NA	NR	Grab
Zinc, Total	mg/l	0.5	1.0	Monthly	Daily Composite	1.5	NR	Grab

**Table Footnotes and Remarks:**

**Footnotes:**

<sup>1</sup> 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 for each sampling month.

<sup>2</sup> 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’.

<sup>3</sup> Testing for formaldehyde shall be conducted using the NIOSH 3500 method.

# DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: *3M Purification Inc. (Formerly CUNO Incorporated)*

**PERMIT, ADDRESS, AND FACILITY DATA**

PERMIT #: SP0000060

APPLICATION #: 201200132

FACILITY ID 134-002

<b><u>Mailing Address:</u></b>					<b><u>Location Address:</u></b>						
<b>Street:</b>	32 River Road				<b>Street:</b>	Same					
<b>City:</b>	Stafford Springs	<b>ST:</b>	CT	<b>Zip:</b>	06076-1500	<b>City:</b>		<b>ST:</b>	CT	<b>Zip:</b>	
<b>Contact Name:</b>	Judith P. Fera				<b>DMR Contact</b>	Same					
<b>Phone No.:</b>	(860) 684 - 8649				<b>Phone No.:</b>						
<b>Contact E-mail:</b>	jpfera@mmm.com				<b>DMR Contact E-mail:</b>						

**PERMIT INFORMATION**

DURATION    5 YEAR X                      10 YEAR \_\_\_                      30 YEAR \_\_\_

TYPE            New \_\_\_            Reissuance \_\_\_            Modification X

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

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

NPDES MAJOR(MA) \_\_\_

NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) X

NPDES or PRETREATMENT MINOR (MI) \_\_\_

PRETREAT SIGNIFICANT INDUS USER(SIU) X

PRETREAT CATEGORICAL (CIU) \_\_\_

POLLUTION PREVENTION MANDATE \_\_\_      ENVIRONMENTAL EQUITY ISSUE \_\_\_

**SIC CODE: 3569 General Industrial Machinery and Equipment**

**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    

**DEEP STAFF ENGINEER Enna Wilson**

**PERMIT FEES**

<i>Discharge Code</i>	<i>DSN Number</i>	<i>Annual Fee</i>
501054Z (Approximation) <sup>1</sup>	201-1	\$ 8,425.00
5060000	201-1	\$ 660.00

**TOTAL \$9,085.00**

<sup>1</sup> This discharge was considered equivalent to the cited category  
Permit Modification Fee: \$ 940.00

**FOR SEWER DISCHARGES**

Discharge to Town of Stafford Springs POTW via its collection system. The facility ID. of the POTW is 134-001.

**NATURE OF BUSINESS GENERATING DISCHARGE**

3M Purification Inc. manufactures disposable liquid filtration media using resins, various pulps, fibers, cellulose and polymer, diatomaceous earth, and polypropylene/polyethylene bi-component filter wound cartridges.

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

DSN 201-1: Consists of a maximum daily flow of 500,000 gallons per day of pretreated wastewaters from fiber filter manufacturing operations, HCL washing of diatomaceous earth, carbon process, alkali cleaning of stainless steel screens, laboratory activities, recycled non-contact cooling water, filtered water overflow, and reverse osmosis (R.O.) reject water. Wastewaters treatment consists of a fine screening, an equalization basin with an approximate capacity of 73,000 gallons and an average retention time of 11 hours (for equalization and mixing), and a pH adjustment system.

**RESOURCES USED TO DRAFT PERMIT**

- X  Federal Effluent Limitation Guideline 40 CFR Part 403  
General Pretreatment Regulations for Existing and  
New Sources of Pollution
- Performance Standards
- Federal Development Document \_\_\_\_\_  
name of category
- Treatability Manual
- X  Department File Information
- Connecticut Water Quality Standards



- Anti-degradation Policy*
- Coastal Management Consistency Review Form (See Other Comments)*
- Other - Explain*

**BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS**

- Case-by-Case Determination and Best Professional Judgment (See Other Comments)*  
***DSN 201-1: BOD<sub>5</sub>, copper, 1,3 dichloro-2-propanol, epichlorohydrin, formaldehyde, lead, pH, phenols, TSS, and zinc***

**GENERAL COMMENTS**

*The Department received an Application No. 201200132 on January 13, 2012, requesting modification of the 3M 's Permit No. SP0000060. A new wastewater from a zeta carbon process will be generated at this facility. As a result, this permit modification is necessary. The Applicant requested authorization to discharge an additional wastewater from a new zeta carbon process through DSN201. Based on the review of this application and supporting documents, DEEP staff has determined that additional monitoring requirements are not required at this time. The wastewater description for DSN 201 has been modified to include this additional wastewater.*

*The following permit modifications have been proposed:*

*Table A has been revised in Section 4(A) of this permit. In addition, DEEP staff has revised Section 5 and Section 7 of this permit to include updated permit format language regarding NetDMR Reporting and Significant Noncompliance Requirements.*