



**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER MANAGEMENT
PERMITTING, ENFORCEMENT & REMEDIATION DIVISION
860-424-3018**

General Permit for Nitrogen Discharges

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General Permit for Nitrogen Discharges

Table of Contents

Section 1. Authority	3
Section 2. Definitions	3
Section 3. Authorization Under This General Permit	5
(a) Eligible Activities or Discharges	5
(b) Geographic Area	5
(c) Effective Date and Expiration Date	5
(d) Effective Date of Authorization	5
Section 4. Conditions of this General Permit	5
(a) Discharge Limits	5
(b) Compliance During Term of Permit	5
(c) Operation of Nitrogen Removal Process Equipment	6
(d) Monitoring Requirements	6
(e) Reporting Requirements	7
(f) Record Keeping Requirements	7
(g) Duty to Correct and Report Violations	7
(h) Duty to Provide Information	7
(i) Certification of Documents	8
(j) Date of Filing	8
(k) False Statements	8
(l) Correction of Inaccuracies	8
(m) Other Applicable Law	8
(n) Other Rights	9
Section 5. Commissioner's Powers	9
(a) Abatement of Violations	9
(b) General Permit Revocation, Suspension, or Modification	9
Appendix 1: Annual Discharge Limits	10

General Permit for Nitrogen Discharges

Section 1. Authority

This general permit is issued under the authority of Public Act 01-180 and Chapter 446k of the Connecticut General Statutes.

Section 2. Definitions

As used in this general permit, and as defined or modified from Section 1 of P.A. 01-180:

“Annual mass loading of total nitrogen” (expressed in pounds per day) means the sum of monthly mass loading of total nitrogen for each month from January through December divided by 12 and rounded to the nearest whole number.

“Authorized activity” means any activity authorized by this general permit.

“CFR” means Code of Federal Regulations.

“Commissioner” means Commissioner as defined by Section 22a-2(b) of the General Statutes.

“Daily composite” means a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of no more than sixty (60) minutes and combined proportionally to flow; or, a composite sample continuously collected over a full operating day proportional to flow.

“Daily mass loading of total nitrogen” (expressed in pounds per day) means the total nitrogen concentration (expressed in mg/L to the nearest 0.1 mg/L) multiplied by the daily flow volume (expressed as MGD, to the nearest 0.1 MGD for facilities with a design capacity of 1.0 MGD or greater and to the nearest 0.01 MGD for facilities with a design capacity of less than 1.0 MGD) multiplied by 8.34 and rounded to the nearest whole number to convert to pounds per day units.

“Department” means the Department of Environmental Protection.

“Discharge Monitoring Report” or *“DMR”* means a report form provided or approved by the Commissioner for use by a permittee to submit discharge monitoring data to the Department relating to compliance with limits and conditions established in the individual permit for a facility.

“Equivalency factor” means a ratio of the unit response of dissolved oxygen to nitrogen in Long Island Sound for each POTW based on the geographic location of the specific POTW's discharge point divided by the unit response of the geographic area with the highest impact.

“Equivalent nitrogen credit” means a nitrogen credit multiplied by the equivalency factor.

“Individual permit” means a permit issued to a named permittee under Section 22a-430-4of the Regulations of Connecticut State Agencies.

“Monthly mass loading of total nitrogen” means the sum of the daily mass loading of total nitrogen for each monitored day during the month divided by the number of monitoring days during the month and rounded to the nearest whole number.

“Monthly Operating Report” or *“MOR”* means a report form provided or approved by the Commissioner for use by a permittee in submitting data to the Department related to the operation of a facility.

“Municipality” means municipality as defined by Section 22a-423 of the Connecticut General Statutes.

“Nitrogen Analysis Report” or *“NAR”* means a report form provided or approved by the Commissioner for use by a permittee in submitting monitoring data to the Department related to the discharge of nitrogen from a facility.

“Nitrogen credit” means the difference between the annual mass loading of total nitrogen specified for a POTW in the general permit for treated nitrogen discharges and the monitored annual mass loading of total nitrogen discharged by that POTW expressed as pounds of nitrogen per day.

“Nitrogen credit exchange program” means the program within the Department established pursuant to Section 4 of P.A. 01-180.

“Nitrogen Wasteload Allocation” means a total load of nitrogen assigned to a discharger expressed in pounds per day of total nitrogen discharged.

“Permittee” means a municipality or person discharging nitrogen as authorized by the general permit.

“Person” means person as defined by Section 22a-423 of the Connecticut General Statutes.

“Publicly Owned Treatment Works” or *“POTW”* means a system used for the collection, treatment or disposal of sewage from one or more parcels of land and that discharges to the waters of the state and is owned by a municipality of the state.

“TMDL” means the Total Maximum Daily Load analysis to achieve water quality standards for dissolved oxygen in Long Island Sound as established by the Department and as approved by the United States Environmental Protection Agency on April 3, 2001.

“Total nitrogen” means the total of the concentrations of ammonia nitrogen, organic nitrogen, nitrite nitrogen, and nitrate nitrogen, expressed as milligrams of nitrogen per liter.

Section 3. Authorization Under This General Permit

(a) *Eligible Activities or Discharges*

This general permit authorizes the discharge of total nitrogen from the POTWs listed in Appendix 1, provided the activities are conducted in accordance with this general permit.

This general permit does not authorize any discharge of water, substance or material into the waters of the state other than the one specified in this section. Any person or municipality which initiates, creates, originates or maintains such a discharge must first apply for and obtain authorization under Section 22a-430 of the General Statutes.

(b) *Geographic Area*

This general permit applies throughout the State of Connecticut.

(c) *Effective Date and Expiration Date of this General Permit*

This general permit is effective on January 1, 2002, and expires on December 31, 2006.

(d) *Effective Date of Authorization*

An activity is authorized by this general permit on the date the general permit is issued.

Section 4. Conditions of this General Permit

A permittee shall conduct activities authorized by this general permit in accordance with the following conditions:

(a) *Discharge Limits*

- (1) Annual discharge limits applicable to each POTW are set forth in Appendix 1, which is incorporated herein in its entirety, as part of this general permit.
- (2) Each permittee shall limit the discharge of nitrogen to the annual discharge limits set forth in Appendix 1, except as set forth in paragraph (b)(1)(b) of this Section.

(b) *Compliance During Term of Permit*

- (1) A permittee shall be in compliance with its annual discharge limits of this general permit if:
 - (A) the POTW's annual mass loading of total nitrogen is less than or equal to the discharge limit set forth in Appendix 1; or,
 - (B) the permittee has secured state-owned equivalent nitrogen credits equal to the amount the POTW exceeded the annual discharge limit set forth in Appendix 1 in accordance with the Nitrogen Credit Exchange Program and P.A. 01-180.

- (2) A permittee shall be out of compliance with the annual discharge limits of the general permit and subject to the enforcement provisions of chapter 446k of the Connecticut General Statutes if:
 - (A) the POTW's annual mass loading of total nitrogen is greater than the discharge limit set forth in Appendix 1; and
 - (B) the permittee fails to secure sufficient state-owned equivalent nitrogen credits in a timely manner in accordance with the Nitrogen Credit Exchange Program and P.A. 01-180.

(c) ***Operation of Nitrogen Removal Process Equipment***

The permittee shall not bypass or fail to operate any of the approved nitrogen removal equipment or processes without the written approval of the Commissioner. The permittee shall operate all necessary equipment to optimize nitrogen removal so as to reduce nitrogen discharges to the maximum extent practicable. This includes but is not limited to all recycle pumping systems, aeration equipment, aeration tank cycling, mixing equipment, anoxic basins, chemical feed systems or any other process equipment necessary for the optimal removal of nitrogen.

(d) ***Monitoring Requirements***

- (1) Effective upon issuance of this general permit, the permittee shall monitor total nitrogen in the final effluent in accordance with the following frequency:
 - (A) POTWs with a design flow rate specified in the individual permit for the facility of less than 10,000,000 gallons per day shall monitor the final effluent at a minimum frequency of weekly.
 - (B) POTWs with a design flow rate specified in the individual permit for the facility equal to or greater than 10,000,000 gallons per day shall monitor the final effluent at a minimum frequency of twice per week.
- (2) Monitoring requirements shall commence on January 1, 2002.
- (3) Final effluent and monitoring location shall be identical to that used to determine compliance with final effluent limitations and monitoring conditions established in the individual permit for the facility.
- (4) All samples analyzed to determine compliance with limits on total nitrogen shall be daily composite samples unless otherwise approved in writing by the Commissioner.
- (5) Chemical analyses to determine compliance with effluent limits and conditions established in this general permit shall be performed using the methods approved in or pursuant to 40 CFR 136 unless an alternative method has been approved in writing pursuant to 40 CFR 136.4.
- (6) The permittee shall measure average daily volume of flow of wastewater received by the facility at the main flow meter as set forth in the individual permit for the facility.

- (7) In the event of a flow meter malfunction on a day when a sample for total nitrogen analysis is collected, the permittee shall utilize the arithmetic average of the 7 highest daily flows measured during the previous 30-day period to calculate the total daily nitrogen loading unless an alternative procedure has been agreed to by the Commissioner.

(e) *Reporting Requirements*

The results of chemical analyses for the total nitrogen in all samples collected during the month and the average daily flow volume of effluent for each day during the month shall be entered on the Monthly Operating Reports (MOR) and Nitrogen Analysis Reports (NAR) and reported to the Department. Results must also be entered in Discharge Monitoring Reports (DMR) as a calculated monthly mass loading of total nitrogen. The MOR, NAR and DMR must be received at the following address by the 15th day of the month following the month samples are collected:

ATTN: MUNICIPAL WASTEWATER MONITORING COORDINATOR
BUREAU OF WATER MANAGEMENT, PLANNING AND STANDARDS DIVISION
CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

(f) *Record Keeping Requirements*

The permittee shall retain copies of all reports required by this general permit, and records of all data used to compile these reports for a period of at least five years from the date of the report submission to the Department.

(g) *Duty to Correct and Report Violations*

Upon learning of a violation of a condition of this general permit, including any failure of flow monitoring equipment, the permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results, prevent further such violation, and report in writing such violation and such corrective action to the Commissioner within five (5) days of the permittee learning of such violation. Such report shall be certified in accordance with subsection 4(i) of this general permit.

(h) *Duty to Provide Information*

If the Commissioner requests any information pertinent to the authorized activity or to compliance with this general permit, the permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with subsection 4(i) of this general permit.

(i) ***Certification of Documents***

Any document, including but not limited to any notice, which is submitted to the Commissioner under this general permit shall be signed by, as applicable, the permittee in accordance with Section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b of the General Statutes, and in accordance with any other applicable statute.”

(j) ***Date of Filing***

For purposes of this general permit, the date of filing with the Commissioner of any document is the date such document is received by the Commissioner. The word “day” as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(k) ***False Statements***

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with Section 22a-6, under Section 53a-157b of the General Statutes.

(l) ***Correction of Inaccuracies***

Within fifteen days after the date a permittee becomes aware of a change in any information in any material submitted pursuant to this general permit, or becomes aware that any such information is inaccurate or misleading or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the Commissioner. Such information shall be certified in accordance with subsection 4(i) of this general permit.

(m) ***Other Applicable Law***

Nothing in this general permit shall relieve the permittee of the obligation to comply with any applicable federal, state and local law, including but not limited to the obligation to obtain and comply with any authorizations required by such law. In the event a POTW is subject to a more stringent nitrogen limitation than set forth in this general permit, the Permittee shall comply with that more stringent limitation and may not purchase or transfer nitrogen credits to comply with that additional limitation.

(n) ***Other Rights***

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any discharge authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state.

Section 5. Commissioner's Powers

(a) ***Abatement of Violations***

The Commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The Commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with Sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the Commissioner by law.

(b) ***General Permit Revocation, Suspension, or Modification***

The Commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment or to implement the 15 year TMDL.

Issued Date: January 2, 2002

ARTHUR J. ROCQUE, JR.

Commissioner

This is a true and accurate copy of the general permit executed on January 2, 2002 by the Commissioner of the Department of Environmental Protection.

Appendix 1: Annual Discharge Limits For Total Nitrogen

Zone	Publicly Owned Treatment Works	Equivalency Factor	Total Nitrogen (pounds/day)					
			2002	2003	2004	2005	2006	2014
1	Jewett City WPCF	0.17	31	28	26	23	19	15
1	Groton City WPCF	0.18	198	184	168	146	121	99
1	Groton Town WPCF	0.18	306	285	259	226	187	153
1	Killingly WPCF	0.14	262	243	222	193	160	131
1	Ledyard WPCF	0.18	15	14	12	11	9	7
1	Montville WPCF	0.18	235	219	199	174	144	118
1	New London WPCF	0.18	770	717	653	568	472	386
1	Norwich WPCF	0.18	401	373	340	295	245	201
1	Stonington Pawcatuck WPCF	0.17	48	45	41	35	29	24
1	Plainfield North WPCF	0.14	68	64	58	50	42	34
1	Plainfield Village WPCF	0.14	47	44	40	35	29	24
1	Putnam WPCF	0.14	106	98	90	78	65	53
1	Sprague WPCF	0.16	15	14	12	11	9	7
1	Stafford Springs WPCF	0.15	119	111	101	88	73	60
1	Stonington Borough WPCF	0.18	27	25	23	20	17	14
1	Stonington Mystic WPCF	0.18	54	50	46	40	33	27
1	Thompson WPCF	0.18	20	19	17	15	12	10
1	Uconn WPCF	0.15	87	81	74	64	54	44
1	Windham WPCF	0.15	251	233	212	185	153	125
2	Bristol WPCF	0.18	795	740	674	586	487	398
2	Canton WPCF	0.18	48	45	41	35	29	24
2	East Hampton WPCF	0.20	108	100	91	80	66	54
2	East Hartford WPCF	0.19	584	543	495	430	357	292
2	East Windsor WPCF	0.19	119	110	101	88	73	59
2	Enfield WPCF	0.19	556	517	471	410	340	278
2	Farmington WPCF	0.18	354	329	300	261	217	178
2	Glastonbury WPCF	0.20	195	182	165	144	120	98
2	Hartford WPCF	0.20	4744	4414	4021	3498	2906	2377
2	Manchester WPCF	0.19	623	580	528	459	381	312
2	Mattabasset WPCF	0.20	1665	1549	1411	1227	1020	834
2	Middletown WPCF	0.20	415	386	351	306	254	208
2	Plainville WPCF	0.18	202	188	171	149	124	101
2	Plymouth WPCF	0.18	83	77	70	61	51	42
2	Windsor Poquonock WPCF	0.19	195	182	165	144	120	98
2	Portland WPCF	0.20	63	58	53	46	38	31
2	Rocky Hill WPCF	0.20	575	535	487	424	352	288
2	Simsbury WPCF	0.18	213	199	181	157	131	107
2	South Windsor WPCF	0.19	211	196	178	155	129	106
2	Suffield WPCF	0.19	89	83	75	66	54	45
2	Vernon WPCF	0.19	367	342	311	271	225	184

Zone	Publicly Owned Treatment Works	Equivalency Factor	Total Nitrogen (pounds/day)					
			2002	2003	2004	2005	2006	2014
2	Windsor Locks WPCF	0.19	131	122	111	97	80	66
2	Winsted WPCF	0.18	127	119	108	94	78	64
3	Branford WPCF	0.60	383	357	325	283	235	192
3	Cheshire WPCF	0.49	205	190	174	151	125	103
3	Meriden WPCF	0.49	896	834	760	661	549	449
3	New Haven East WPCF	0.60	3128	2911	2652	2307	1916	1568
3	North Haven WPCF	0.60	315	294	267	233	193	158
3	Southington WPCF	0.49	406	378	344	299	249	204
3	Wallingford WPCF	0.60	537	500	455	396	329	269
3	West Haven WPCF	0.60	705	655	597	519	431	353
4	Ansonia WPCF	0.67	229	213	194	169	140	115
4	Beacon Falls WPCF	0.67	24	22	20	18	15	12
4	Danbury WPCF	0.46	882	821	748	651	540	442
4	Derby WPCF	0.67	142	132	120	105	87	71
4	Litchfield WPCF	0.35	47	43	40	34	29	24
4	Milford Beaver Brook WPCF	0.67	188	175	159	139	115	94
4	Milford Housatonic WPCF	0.67	615	572	521	453	377	307
4	Naugatuck Treatment Co.	0.60	492	458	417	363	301	246
4	New Milford WPCF	0.46	55	52	47	41	34	28
4	Newtown WPCF	0.46	33	31	28	24	20	42
4	Norfolk WPCF	0.35	22	20	19	16	13	11
4	North Canaan WPCF	0.35	26	24	22	19	16	13
4	Salisbury WPCF	0.35	42	39	36	31	26	21
4	Seymour WPCF	0.67	122	113	103	90	75	61
4	Shelton WPCF	0.67	211	197	179	156	129	106
4	Southbury Tr. School WPCF	0.46	30	28	25	22	18	15
4	Stratford WPCF	0.67	710	660	601	523	435	356
4	Thomaston WPCF	0.60	83	77	70	61	51	42
4	Torrington WPCF	0.60	495	461	420	365	303	248
4	Waterbury WPCF	0.60	2015	1875	1708	1486	1234	1049
5	Bridgeport East WPCF	0.85	722	672	612	532	442	362
5	Bridgeport West WPCF	0.85	2078	1933	1761	1532	1273	1041
5	Fairfield WPCF	0.85	811	754	687	598	497	406
5	Westport WPCF	0.85	173	161	147	128	106	87
6	Greenwich WPCF	1.00	957	890	811	705	586	479
6	New Canaan WPCF	1.00	127	119	108	94	78	64
6	Norwalk WPCF	1.00	1433	1333	1215	1057	878	718
6	Ridgefield South St. WPCF	1.00	58	54	49	43	36	29
6	Stamford WPCF	1.00	1848	1719	1566	1362	1132	926