

## UIC PERMIT

### **issued to**

John F. Carr, Jr.  
27 Laurel Hill Rd.  
Bridgewater, CT 06752

**Location Address:**  
Joshua Heights  
Main Street North  
Bridgewater, CT 06752

**Permit ID:** UI0000514

**Permit Expires:**

**Watershed:** Shepaug River Watershed

**Basin Code:** 6700

### **SECTION 1: GENERAL PROVISIONS**

- (A) This permit is issued in accordance with section 1421 of the Federal Safe Drinking Water Act 42 USC 300h et. seq., section 22a-430 of Chapter 446k, Connecticut General Statutes (“CGS”), and Regulations of Connecticut State Agencies (“RCSA”) adopted thereunder, as amended.
- (B) John F. Carr, Jr., (“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)(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 to Comply
- (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-157 of the CGS.
- (E) The Permittee shall comply with Section 22a-416-1 through Section 22a-416-10 of the RCSA concerning operator certification.
- (F) No provision of this permit and no action or inaction by the Commissioner of Energy & Environmental Protection (“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) The authorization to discharge under this permit may not be transferred without prior written approval of the 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 may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.
- (H) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (I) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the RCSA.

## 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.
- (B) In addition to the above, the following definitions shall apply to this permit:
- “Annual”, in the context of a sampling frequency, shall mean the sample must be taken in the month of March.
- “Quarterly”, in the context of a sampling frequency, shall mean sampling is required during each calendar quarter ending on the last day of March, June, September and December.
- “3 times per year”, in the context of a maintenance frequency, shall mean the maintenance must be performed at least 3 times during the period of May to November.
- “Twice per month”, when used as a sample frequency, shall mean two samples per calendar month collected no less than 12 days apart.
- “Twelve Month Rolling Average”, in the context of this permit, is defined as the average of the current month’s samples averaged with the average from the previous eleven months.

## SECTION 3: COMMISSIONER’S DECISION

- (A) The Commissioner has made a final determination and found that the system installed for the treatment of the discharge will protect the waters of the state from pollution. The Commissioner’s decision is based on **Application No. 201502206** for permit issuance received on March 24, 2015 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge a maximum flow of 43,200 gallons per day of domestic sewage 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 that may be authorized under the Federal Safe Drinking Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Safe Drinking Water Act or Connecticut General Statutes or regulations adopted thereunder, which are then applicable.

## SECTION 4: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) The use of any sewage system additive as defined in section 22a-460(g) of the CGS is prohibited unless such additive complies with section 122a-461 of the CGS. The Commissioner in no way certifies the safety or effectiveness of any sewage system additive. The Permittee shall include in the public offering statement, condominium instruments, rules and regulations adopted pursuant thereto, and any management agreement for the facility, the requirement that no sewage system additive shall be used in the subject treatment system unless such additive complies with section 22a-461 of the CGS.
- (B) Oils, greases, industrial or commercial wastes, toxic chemicals, or other substances that will adversely

affect the operation of the subsurface sewage treatment and disposal system, or, which may pollute ground or surface water, shall not be discharged to the subsurface sewage treatment and disposal system. The Permittee shall include in the public offering statement, condominium instruments, rules and regulations adopted pursuant thereto, and any management agreement for the facility, the requirement that no oils, greases, industrial or commercial wastes, toxic chemicals, or other liquids that will adversely affect the operation of the subsurface sewage treatment and disposal system or that may pollute ground or surface water shall be discharged to the subsurface sewage treatment and disposal system.

- (C) The Permittee shall assure that groundwater affected by the subject discharge shall conform to the Connecticut Water Quality Standards.
- (D) This permit becomes effective on the date of signature.
- (E) The Permittee shall operate and maintain all processes as installed in accordance with the approved plans and specifications. This includes but is not limited to all recycle pumping systems, aeration equipment, aeration tank, mixing equipment, denitrification unit, chemical feed systems, settling tank, or any other process equipment necessary for the optimal removal of pollutants. The Permittee shall not bypass or fail to operate any of the approved equipment or processes without the written approval of the Commissioner.
- (F) The discharges shall not exceed and shall otherwise conform to specific terms and conditions listed in this permit. The discharges are restricted by, and shall be monitored in accordance with the Tables A through H, which are incorporated into this permit as Attachment 1.
- (G) The pH of the discharge shall not be less than 6.0 nor greater than 9.0 Standard Units at any time and shall be monitored on a weekly basis. The Permittee shall report pH values, specifically maximum and minimum, for each day of sample collection and the pH range for each month. The pH range for each month is defined as the highest and lowest single pH reading during all operating days of the month including periods when sampling is not performed.
- (H) The Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report on the discharge monitoring report the total flow and number of hours of discharge for the day of sample collection and the average daily flow for each sampling month.
- (I) All samples shall be comprised of only those wastewaters described in this schedule; therefore, samples shall be taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable. All samples taken shall be representative of the discharge during standard operating conditions.
- (J) In cases where limits and sample type are specified but sampling is not required, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Energy and Environmental Protection personnel, the Permittee, or other parties.
- (K) The Permittee shall ensure that the wastewater treatment facility is operated by a person with a valid and effective certification in the State of Connecticut, at a minimum, as a facility Class II operator pursuant to C.G.S. 22a-416(d) and the regulations adopted thereunder. The Permittee shall ensure that the wastewater treatment facility is operated by such an operator with such qualifications throughout the entire life of the wastewater treatment facility.
- (L) The Permittee shall monitor, inspect and maintain the treatment facilities in accordance with Tables I through L, which are incorporated into this permit as Attachment 2.
- (M) The Permittee shall perform ground water monitoring in accordance with Table M, which is incorporated into this permit as Attachment 3.

- (N) The monitoring and sampling required within this permit is a minimum for reporting purposes only. More frequent monitoring and sampling of the treatment system may be required to operate the facility to obtain acceptable results for the parameters being monitored as required by the Operation and Maintenance Manual approved by the Commissioner.

#### **SECTION 5: SAMPLE COLLECTION AND HANDLING, 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. All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.
- (B) If any sample analysis indicates that an effluent limitation specified in Section 4 of this permit has been exceeded, a second sample of the effluent shall be collected and analyzed for the parameter(s) in question and the results shall be reported to the Commissioner within 30 days of the exceedance. Resampling for a permit violation is in addition to routine required sampling.
- (C) The Permittee shall enter the results of chemical analysis and treatment facilities monitoring and maintenance required by Section 4 on a Discharge Monitoring Report (DMR) provided by this office and shall submit such DMR to the Bureau of Materials Management and Compliance Assurance at the address below. 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 each violation of the limitations specified, the corrective actions performed, and a schedule for completing any necessary remaining corrective action. The DMR shall be received at this address by the last day of the month following the month in which the samples are taken.

**Attn: DMR Processing  
Connecticut Department of Energy and Environmental Protection  
Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division  
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 report all chemical analysis, monitoring and maintenance 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 thirty (30) 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 [deep.netdmr@ct.gov](mailto:deep.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 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 in paragraph (C) of this Section of this permit. DMRs shall be submitted electronically to the Department no later than the last 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 paragraph (B) of this Section and in the following Section of this Permit as an attachment in NetDMR. NetDMR is accessed from: <https://netdmr.epa.gov/netdmr/public/home.htm>.

(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 [deep.netdmr@ct.gov](mailto:deep.netdmr@ct.gov):

**Attn: NetDMR Coordinator  
Connecticut Department of Energy and Environmental Protection  
Bureau of Materials Management and Compliance Assurance  
Water Permitting and Enforcement Division  
79 Elm Street  
Hartford, CT 06106-5127**

(d) Non-Electronic or Hard-Copy Submission

The results of chemical analysis and treatment facilities monitoring that are not required to be submitted electronically under Section 5 shall be submitted in hard-copy form on a DMR provided by this office. Such DMRs and other reports not required to be submitted electronically shall be reported to the Bureau of Materials Management and Compliance Assurance at the following address.

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

(e) Copies of all hard-copy DMRs shall be submitted concurrently to the local Health Department.

**SECTION 6: COMPLIANCE SCHEDULE**

- (A) On or before three (3) months after issuance of this permit, the Permittee shall verify in writing to the Commissioner that the alternative treatment technology is operating in accordance with the approved plans and specifications and is achieving compliance with all permit limits and conditions. The Permittee shall obtain written concurrence from the design engineer, the technology provider, and the wastewater treatment facility operator who will be responsible for the operation of the wastewater treatment facility.
- (B) On or before seven (7) days after issuance of this permit, the Permittee shall record on the land records of the Town of Bridgewater a document indicating the location of the zone of influence created by the subject discharge, as reflected in the application and approved plans and specifications for this permit. On or before one (1) month after issuance of this permit, the Permittee shall submit written verification to the Commissioner that the approved document indicating the location of the zone of influence created by the subject discharge as reflected in the application for this permit has been recorded on the land records in the Town of Bridgewater.
- (C) On or before seven (7) days after issuance of this permit, the Permittee shall record a copy thereof on the land records in the Town of Bridgewater. On or before one (1) month after issuance of this permit, the Permittee shall submit written verification to the Commissioner that this permit has been recorded in the land records in the Town of Bridgewater.
- (D) Every two years, on or before the anniversary date of the issuance of this permit, the Permittee shall submit the results of a detailed permit compliance audit to the Commissioner. Such audits shall be performed within sixty (60) days prior to the anniversary date. The compliance audits shall be performed by a qualified professional engineer licensed to practice in Connecticut with the appropriate education, experience and training that is relevant to the work required.

Each audit shall evaluate compliance with all permit terms and conditions for the preceding two-year period. The evaluation shall review all pertinent records and documents as necessary, including Discharge Monitoring Reports (DMRs), laboratory reports, operations and maintenance plans, performance logs/records, equipment specifications, maintenance schedules, engineering drawings, and spare parts inventory.

Each audit report shall include a description of all records and documents used in the evaluation, a summary of compliance with permit terms and conditions, and detailed descriptions of all remedial actions

taken or proposed to address each violation or deficiency discovery.

(E) A copy of each audit shall be submitted concurrently to the local Health Department.

This permit is hereby issued on

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Michael Sullivan  
Deputy Commissioner  
Department of Energy and Environmental Protection

cc: Local Health Dept.  
DMR

DRAFT



ATTACHMENT 1

<b>TABLE A</b>			
Discharge Serial No. 301-2		Monitoring Location: G	
Wastewater Description: Domestic Sewage Influent			
Monitoring Location Description: Influent to the SBR – Fluidyne ISAM Unit			
Average Daily Flow: 7,200 gallons per day		Maximum Daily Flow: 10,800 gallons per day	
<b>PARAMETER</b>	<b>INSTANTANEOUS MONITORING</b>		
	Units	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	Grab	Twice per month
Total Suspended Solids	mg/l	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	Grab	Twice per month
Total Phosphorus	mg/l	Grab	Twice per month
pH	SU	Grab	Twice per month
Oils & Grease	mg/l	Grab	Twice per month

<b>TABLE B</b>			
Discharge Serial No. 302-2		Monitoring Location: G	
Wastewater Description: Domestic Sewage Influent			
Monitoring Location Description: Influent to the SBR – Fluidyne ISAM Unit			
Average Daily Flow: 7,200 gallons per day		Maximum Daily Flow: 10,800 gallons per day	
<b>PARAMETER</b>	<b>INSTANTANEOUS MONITORING</b>		
	Units	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	Grab	Twice per month
Total Suspended Solids	mg/l	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	Grab	Twice per month
Total Phosphorus	mg/l	Grab	Twice per month
pH	SU	Grab	Twice per month
Oils & Grease	mg/l	Grab	Twice per month

<b>TABLE C</b>			
Discharge Serial No. 303-2		Monitoring Location: G	
Wastewater Description: Domestic Sewage Influent			
Monitoring Location Description: Influent to the SBR – Fluidyne ISAM Unit			
Average Daily Flow: 7,200 gallons per day		Maximum Daily Flow: 10,800 gallons per day	
<b>PARAMETER</b>	<b>INSTANTANEOUS MONITORING</b>		
	Units	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	Grab	Twice per month
Total Suspended Solids	mg/l	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	Grab	Twice per month
Total Phosphorus	mg/l	Grab	Twice per month
pH	SU	Grab	Twice per month
Oils & Grease	mg/l	Grab	Twice per month

<b>TABLE D</b>			
Discharge Serial No. 304-2		Monitoring Location: G	
Wastewater Description: Domestic Sewage Influent			
Monitoring Location Description: Influent to the SBR – Fluidyne ISAM Unit			
Average Daily Flow: 7,200 gallons per day		Maximum Daily Flow: 10,800 gallons per day	
<b>PARAMETER</b>	<b>INSTANTANEOUS MONITORING</b>		
	Units	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	Grab	Twice per month
Total Suspended Solids	mg/l	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	Grab	Twice per month
Total Phosphorus	mg/l	Grab	Twice per month
pH	SU	Grab	Twice per month
Oils & Grease	mg/l	Grab	Twice per month

<b>TABLE E</b>					
Discharge Serial No. 301-2			Monitoring Location: 1		
Wastewater Description: Domestic Sewage Effluent					
Monitoring Location Description: Final effluent From SBR Fluidyne ISAM Unit					
Average Daily Flow: 7,200 gallons per day			Maximum Daily Flow: 10,800 gallons per day		
PARAMETER	FLOW/TIME BASED MONITORING				
	Units	Average Daily Flow Limit	Maximum Daily Flow Limit	Sample Type	Sample Frequency
Flow Rate (Average daily) <sup>1</sup>	gpd	7,200	10,800	Daily Flow	Continuous
PARAMETER	INSTANTANEOUS MONITORING				
	Units	Average Monthly Limit	Maximum Concentration	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	20	30	Grab	Twice per month
Total Suspended Solids	mg/l	20	30	Grab	Twice per month
Total Nitrogen	mg/l	10 <sup>2</sup>	---	Grab	Twice per month
Ammonia	mg/l	---	---	Grab	Twice per month
Nitrate Nitrogen	mg/l	---	---	Grab	Twice per month
Nitrite Nitrogen	mg/l	---	---	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	---	---	Grab	Twice per month
Orthophosphate	mg/l	---	---	Grab	Twice per month
Total Phosphorus	mg/l	---	---	Grab	Twice per month
pH	SU	---	---	Grab	Twice per month
Alkalinity	mg/l	---	---	Grab	Twice per month
<b>FOOTNOTES:</b>					
1. For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report on the DMR the Average Daily Flow and the Maximum Daily Flow for each month.					
2. Limit is based on a twelve month rolling average.					
<b>ADDITIONAL NOTES:</b>					
1. “---” in the limits column on this monitoring table means a limit is not specified, but monitoring is required and a value must be reported on the DMR.					

<b>TABLE F</b>					
Discharge Serial No. 302-2			Monitoring Location: 1		
Wastewater Description: Domestic Sewage Effluent					
Monitoring Location Description: Final effluent From SBR Fluidyne ISAM Unit					
Average Daily Flow: 7,200 gallons per day			Maximum Daily Flow: 10,800 gallons per day		
<b>PARAMETER</b>	<b>FLOW/TIME BASED MONITORING</b>				
	<b>Units</b>	<b>Average Daily Flow Limit</b>	<b>Maximum Daily Flow Limit</b>	<b>Sample Type</b>	<b>Sample Frequency</b>
Flow Rate (Average daily) <sup>1</sup>	gpd	7,200	10,800	Daily Flow	Continuous
<b>PARAMETER</b>	<b>INSTANTANEOUS MONITORING</b>				
	<b>Units</b>	<b>Average Monthly Limit</b>	<b>Maximum Concentration</b>	<b>Sample Type</b>	<b>Sample Frequency</b>
Biochemical Oxygen Demand	mg/l	20	30	Grab	Twice per month
Total Suspended Solids	mg/l	20	30	Grab	Twice per month
Total Nitrogen	mg/l	10 <sup>2</sup>	---	Grab	Twice per month
Ammonia	mg/l	---	---	Grab	Twice per month
Nitrate Nitrogen	mg/l	---	---	Grab	Twice per month
Nitrite Nitrogen	mg/l	---	---	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	---	---	Grab	Twice per month
Orthophosphate	mg/l	---	---	Grab	Twice per month
Total Phosphorus	mg/l	---	---	Grab	Twice per month
pH	SU	---	---	Grab	Twice per month
Alkalinity	mg/l	---	---	Grab	Twice per month
<b>FOOTNOTES:</b>					
<ol style="list-style-type: none"> <li>For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report on the DMR the Average Daily Flow and the Maximum Daily Flow for each month.</li> <li>Limit is based on a twelve month rolling average.</li> </ol>					
<b>ADDITIONAL NOTES:</b>					
<ol style="list-style-type: none"> <li>“---” in the limits column on this monitoring table means a limit is not specified, but monitoring is required and a value must be reported on the DMR.</li> </ol>					

<b>TABLE G</b>					
Discharge Serial No. 303-2			Monitoring Location: 1		
Wastewater Description: Domestic Sewage Effluent					
Monitoring Location Description: Final effluent from SBR Fluidyne ISAM Unit					
Average Daily Flow: 7,200 gallons per day			Maximum Daily Flow: 10,800 gallons per day		
PARAMETER	FLOW/TIME BASED MONITORING				
	Units	Average Daily Flow Limit	Maximum Daily Flow Limit	Sample Type	Sample Frequency
Flow Rate (Average daily) <sup>1</sup>	gpd	7,200	10,800	Daily Flow	Continuous
PARAMETER	INSTANTANEOUS MONITORING				
	Units	Average Monthly Limit	Maximum Concentration	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	20	30	Grab	Twice per month
Total Suspended Solids	mg/l	20	30	Grab	Twice per month
Total Nitrogen	mg/l	10 <sup>2</sup>	---	Grab	Twice per month
Ammonia	mg/l	---	---	Grab	Twice per month
Nitrate Nitrogen	mg/l	---	---	Grab	Twice per month
Nitrite Nitrogen	mg/l	---	---	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	---	---	Grab	Twice per month
Orthophosphate	mg/l	---	---	Grab	Twice per month
Total Phosphorus	mg/l	---	---	Grab	Twice per month
pH	SU	---	---	Grab	Twice per month
Alkalinity	mg/l	---	---	Grab	Twice per month
<b>FOOTNOTES:</b>					
<ol style="list-style-type: none"> <li>For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report on the DMR the Average Daily Flow and the Maximum Daily Flow for each month.</li> <li>Limit is based on a twelve month rolling average.</li> </ol>					
<b>ADDITIONAL NOTES:</b>					
<ol style="list-style-type: none"> <li>“---” in the limits column on this monitoring table means a limit is not specified, but monitoring is required and a value must be reported on the DMR.</li> </ol>					

<b>TABLE H</b>					
Discharge Serial No. 304-2			Monitoring Location: 1		
Wastewater Description: Domestic Sewage Effluent					
Monitoring Location Description: Final effluent From SBR Fluidyne ISAM Unit					
Average Daily Flow: 7,200 gallons per day			Maximum Daily Flow: 10,800 gallons per day		
<b>PARAMETER</b>	<b>FLOW/TIME BASED MONITORING</b>				
	<b>Units</b>	<b>Average Daily Flow Limit</b>	<b>Maximum Daily Flow Limit</b>	<b>Sample Type</b>	<b>Sample Frequency</b>
Flow Rate (Average daily) <sup>1</sup>	gpd	7,200	10,800	Daily Flow	Continuous
<b>PARAMETER</b>	<b>INSTANTANEOUS MONITORING</b>				
	<b>Units</b>	<b>Average Monthly Limit</b>	<b>Maximum Concentration</b>	<b>Sample Type</b>	<b>Sample Frequency</b>
Biochemical Oxygen Demand	mg/l	20	30	Grab	Twice per month
Total Suspended Solids	mg/l	20	30	Grab	Twice per month
Total Nitrogen	mg/l	10 <sup>2</sup>	---	Grab	Twice per month
Ammonia	mg/l	---	---	Grab	Twice per month
Nitrate Nitrogen	mg/l	---	---	Grab	Twice per month
Nitrite Nitrogen	mg/l	---	---	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	---	---	Grab	Twice per month
Orthophosphate	mg/l	---	---	Grab	Twice per month
Total Phosphorus	mg/l	---	---	Grab	Twice per month
pH	SU	---	---	Grab	Twice per month
Alkalinity	mg/l	---	---	Grab	Twice per month
<b>FOOTNOTES:</b>					
<ol style="list-style-type: none"> <li>For this parameter, the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report on the DMR the Average Daily Flow and the Maximum Daily Flow for each month.</li> <li>Limit is based on a twelve month rolling average.</li> </ol>					
<b>ADDITIONAL NOTES:</b>					
<ol style="list-style-type: none"> <li>“---” in the limits column on this monitoring table means a limit is not specified, but monitoring is required and a value must be reported on the DMR.</li> </ol>					

ATTACHMENT 2

<b>TABLE I INSPECTION, MONITORING AND MAINTENANCE REQUIREMENTS</b>	
Discharge Serial No.: 301-2	Monitoring Location: S
Wastewater Description: Domestic Sewage	
Average Daily Flow: 7,200 gallons per day	Maximum Daily Flow: 10,800 gallons per day
<b><u>INSPECTION, MONITORING, or MAINTENANCE</u></b>	<b><u>MINIMUM FREQUENCY</u></b>
Water meter readings of water usage	Weekly
Visual inspection of Fluidyne ISAM Unit	Monthly
Visual inspection of anoxic chamber	Monthly
Visual inspection of final settling tank	Monthly
Mechanical inspection of alarms	Monthly
Mechanical inspection of blowers	Monthly
Mechanical inspection of carbon feed system	Monthly
Mechanical inspection of alkalinity feed system	Monthly
Pump out sludge from the settling chamber	Annually
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching beds	Quarterly
Mow grass over leaching field bed	3 times per year
<b>ADDITIONAL NOTES:</b>	
<ol style="list-style-type: none"> <li>1. All inspection, monitoring, and maintenance required in this table shall be reported annually by the end of each January as an attachment to the December DMR.</li> <li>2. The Newtown Health District Sanitarian shall be notified at least one week prior to pumping of septic tanks and grease traps. Verification of all pump outs shall be attached to the monitoring report and a copy of the report shall be sent to the Newtown Health District Director of Health.</li> </ol>	

<b>TABLE J</b>	
<b>INSPECTION, MONITORING AND MAINTENANCE REQUIREMENTS</b>	
Discharge Serial No.: 302-2	Monitoring Location: S
Wastewater Description: Domestic Sewage	
Average Daily Flow: 7,200 gallons per day	Maximum Daily Flow: 10,800 gallons per day
<u><b>INSPECTION, MONITORING, or MAINTENANCE</b></u>	<u><b>MINIMUM FREQUENCY</b></u>
Water meter readings of water usage	Weekly
Visual inspection of Fluidyne ISAM Unit	Monthly
Visual inspection of anoxic chamber	Monthly
Visual inspection of final settling tank	Monthly
Mechanical inspection of alarms	Monthly
Mechanical inspection of blowers	Monthly
Mechanical inspection of carbon feed system	Monthly
Mechanical inspection of alkalinity feed system	Monthly
Pump out sludge from the settling chamber	Annually
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching beds	Quarterly
Mow grass over leaching field bed	3 times per year
<b>ADDITIONAL NOTES:</b>	
<ol style="list-style-type: none"> <li>1. All inspection, monitoring, and maintenance required in this table shall be reported annually by the end of each January as an attachment to the December DMR.</li> <li>2. The Newtown Health District Sanitarian shall be notified at least one week prior to pumping of septic tanks and grease traps. Verification of all pump outs shall be attached to the monitoring report and a copy of the report shall be sent to the Newtown Health District Director of Health.</li> </ol>	



<b>TABLE K</b>	
<b>INSPECTION, MONITORING AND MAINTENANCE REQUIREMENTS</b>	
Discharge Serial No.: 303-2	Monitoring Location: S
Wastewater Description: Domestic Sewage	
Average Daily Flow: 7,200 gallons per day	Maximum Daily Flow: 10,800 gallons per day
<b><u>INSPECTION, MONITORING, or MAINTENANCE</u></b>	<b><u>MINIMUM FREQUENCY</u></b>
Water meter readings of water usage	Weekly
Visual inspection of Fluidyne ISAM Unit	Monthly
Visual inspection of anoxic chamber	Monthly
Visual inspection of final settling tank	Monthly
Mechanical inspection of alarms	Monthly
Mechanical inspection of blowers	Monthly
Mechanical inspection of carbon feed system	Monthly
Mechanical inspection of alkalinity feed system	Monthly
Pump out sludge from the settling chamber	Annually
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching beds	Quarterly
Mow grass over leaching field bed	3 times per year
<b>ADDITIONAL NOTES:</b>	
<ol style="list-style-type: none"> <li>1. All inspection, monitoring, and maintenance required in this table shall be reported annually by the end of each January as an attachment to the December DMR.</li> <li>2. The Newtown Health District Sanitarian shall be notified at least one week prior to pumping of septic tanks and grease traps. Verification of all pump outs shall be attached to the monitoring report and a copy of the report shall be sent to the Newtown Health District Director of Health.</li> </ol>	

<b>TABLE L</b>	
<b>INSPECTION, MONITORING AND MAINTENANCE REQUIREMENTS</b>	
Discharge Serial No.: 304-2	Monitoring Location: S
Wastewater Description: Domestic Sewage	
Average Daily Flow: 7,200 gallons per day	Maximum Daily Flow: 10,800 gallons per day
<b><u>INSPECTION, MONITORING, or MAINTENANCE</u></b>	<b><u>MINIMUM FREQUENCY</u></b>
Water meter readings of water usage	Weekly
Visual inspection of Fluidyne ISAM Unit	Monthly
Visual inspection of anoxic chamber	Monthly
Visual inspection of final settling tank	Monthly
Mechanical inspection of alarms	Monthly
Mechanical inspection of blowers	Monthly
Mechanical inspection of carbon feed system	Monthly
Mechanical inspection of alkalinity feed system	Monthly
Pump out sludge from the settling chamber	Annually
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching beds	Quarterly
Mow grass over leaching field bed	3 times per year
<b>ADDITIONAL NOTES:</b>	
<ol style="list-style-type: none"> <li>1. All inspection, monitoring, and maintenance required in this table shall be reported annually by the end of each January as an attachment to the December DMR.</li> <li>2. The Newtown Health District Sanitarian shall be notified at least one week prior to pumping of septic tanks and grease traps. Verification of all pump outs shall be attached to the monitoring report and a copy of the report shall be sent to the Newtown Health District Director of Health.</li> </ol>	

ATTACHMENT 3

<b>TABLE M GROUNDWATER MONITORING</b>			
<b>DISCHARGE SERIAL NO.</b> 301 A, 302 A, 303 A, 304 A		<b>MONITORING LOCATION:</b> <i>W-downgradient;</i>	
<b>GROUND WATER MONITORING WELL NO:</b> <i>as named on AS BUILT</i>		<b>DESCRIPTION:</b> <i>downgradient monitoring wells</i>	
PARAMETER	UNITS	MINIMUM FREQUENCY OF SAMPLING	SAMPLE TYPE
Fecal Coliform	col/100ml	Quarterly	Grab
Groundwater Depth (Standard depth below grade)	Ft	Quarterly	Instantaneous
Ammonia Nitrogen	mg/l	Quarterly	Grab
Nitrate Nitrogen	mg/l	Quarterly	Grab
Nitrite Nitrogen	mg/l	Quarterly	Grab
Total Kjeldahl Nitrogen	mg/l	Quarterly	Grab
Total Nitrogen	mg/l	Quarterly	Grab
pH	S.U.	Quarterly	Grab
Total Dissolved Phosphorous	mg/l	Quarterly	Grab

**DATA TRACKING AND TECHNICAL FACT SHEET**

**PERMIT #: UI0000514      APPLICATION #: 201502206**

**DISCHARGER NAME AND ADDRESS DATA**

**Permittee:** John F. Carr, Jr.

**Mailing Address:**

Street: 27 Laurel Hill Road

City: Bridgewater ST: CT Zip: 06752

**Location Address:** Joshua Heights

Street: Main Street North

City: Bridgewater St. CT Zip: 06752

**Contact Name:** John

**Contact Name:**

**PERMIT DURATION**

5 YEAR ( ) 10 YEAR ( X ) 30 YEAR ( )

**DISCHARGE CATEGORIZATION**

POINT ( )      NON-POINT ( X )      GIS # \_\_\_\_\_

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

MAJOR ( )    SIGNIFICANT MINOR ( )    MINOR ( X )

**COMPLIANCE SCHEDULE**    YES X    NO

POLLUTION PREVENTION ( )    TREATMENT REQUIREMENT ( )    WATER CONSERVATION ( )

PERMIT STEPS ( )    WATER QUALITY REQUIREMENT ( )    REMEDIATION ( )    AUDIT LANGUAGE ( X )

OTHER ( X )

**OWNERSHIP CODE**

Private ( X )    Federal ( )    State ( )    Municipal (town only) ( )    Other public ( )

**UIC PERMIT INFORMATION**

Total Wells 4

Well Type 5W12

**PERMIT FEES**

DISCHARGE CODE <u>312000a</u> REPRESENTING DSN <u>301-2</u> ANNUAL FEE	} \$1,110
DISCHARGE CODE <u>312000a</u> REPRESENTING DSN <u>302-2</u> ANNUAL FEE	
DISCHARGE CODE <u>312000a</u> REPRESENTING DSN <u>303-2</u> ANNUAL FEE	
DISCHARGE CODE <u>312000a</u> REPRESENTING DSN <u>304-2</u> ANNUAL FEE	

**DEEP STAFF ENGINEER/ANALYST**

Antoanela Daha

**PERMIT TYPE**

New  Reissuance  Modification  Subsection-e

**NATURE OF BUSINESS GENERATING DISCHARGE**

Joshua Heights is a proposed a 282-bedroom residential development and a Community Center.

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

DSN 301-2 represents the domestic sewage discharge from Building 1 and the Community Center. The design flow for this system is 10,800 gallons per day. This is an alternative sewage treatment system utilizing a Fluidyne ISAM SBR unit flowed by a leaching bed.

DSN 302-2 represents the domestic sewage discharge from Building 2. The design flow for this system is 10,800 gallons per day. This is an alternative sewage treatment system utilizing a Fluidyne ISAM SBR unit flowed by a leaching bed.

DSN 303-2 represents the domestic sewage discharge from Building 3. The design flow for this system is 10,800 gallons per day. This is an alternative sewage treatment system utilizing a Fluidyne ISAM SBR unit flowed by a leaching bed.

DSN 304-2 represents the domestic sewage discharge from Building 4. The design flow for this system is 10,800 gallons per day. This is an alternative sewage treatment system utilizing a Fluidyne ISAM SBR unit flowed by a leaching bed.

**RESOURCES USED TO DRAFT PERMIT**

Federal Effluent Limitation Guideline 40CFR  
name of category

Performance Standards

Federal Development Document  
name of category

Treatability Manual

Department File Information

Connecticut Water Quality Standards

Anti-degradation Policy

Coastal Management Consistency Review Form

Other - Explain

**BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS**

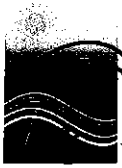
Case by Case Determination (See Other Comments)

**OTHER COMMENTS**

**PROJECT HISTORY**

Application received on March 24, 2015

Notice of Sufficiency issued on June 10, 2015



**NOTICE OF PUBLIC HEARING  
REGARDING AN UNDERGROUND INJECTION CONTROL PERMIT  
FOR THE FOLLOWING DISCHARGE  
INTO THE WATERS OF THE STATE OF CONNECTICUT**

**TENTATIVE DETERMINATION**

On August 18, 2016 the Commissioner of Energy and Environmental Protection ("Commissioner") gave notice of a tentative determination to issue a permit based on an application submitted by **John F. Carr, Jr.** ("the applicant") under section 22a-430 of the Connecticut General Statutes for a permit to discharge into the waters of the state. The tentative determination was published in the Danbury News Times on August 19, 2016.

In accordance with applicable federal and state law, the Commissioner has made a tentative determination that the proposed system to treat the discharge will protect the waters of the state from pollution and the Commissioner proposes to require the applicant to submit plans and specifications for the proposed treatment system and such additional information as the Commissioner deems necessary to ensure the protection of the waters of the state from pollution. If such plans are approved by the Commissioner and the treatment system is constructed in full compliance with the approval, the Commissioner proposes to issue a permit for this discharge to groundwaters in the Housatonic River Watershed.

The proposed permit, if issued by the Commissioner, will require periodic monitoring to demonstrate that the discharge will not cause pollution.

**APPLICANT'S PROPOSAL**

John F. Carr, Jr. proposes to discharge 43,200 gallons per day of treated domestic sewage to the groundwaters of the Housatonic River Watershed from a 282-bedroom residential development and a Community Center Building.

The name and mailing address of the permit applicant are: 27 Laurel Hill Rd., Bridgewater, CT 06752.  
The activity takes place at: Joshua Heights, Main St. North, Bridgewater, CT 06752.

**REGULATORY CONDITIONS**

Type of Treatment

The four proposed domestic sewage treatment and disposal systems are each comprised of a Fluidyne ISAM Unit, followed by a leaching bed.

**COMMISSIONER'S AUTHORITY**

The Commissioner of Energy and Environmental Protection is authorized to approve or deny such permits pursuant to section 22a-430 of the Connecticut General Statutes and the Water Discharge Permit Regulations (section 22a-430-3 and 4 of the Regulations of Connecticut State Agencies) and section 1421 of the Federal Safe Drinking Water Act 42 USC et. seq.

**INFORMATION REQUESTS**

The application has been assigned the following numbers by the Department of Energy and Environmental Protection. Please use these numbers when corresponding with this office regarding this application.

APPLICATION NO.: 201502206

PERMIT ID NO.: UI00000514

Interested persons may obtain copies of the application from: John F. Carr, 27 Laurel Hill Rd., Bridgewater, CT 06752, Phone No.: 203-417-0277.

The application is available for inspection by contacting Antoanela Daha at 860-424-3025, at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 79 Elm Street, Hartford, CT 06106-5127 from 8:30 - 4:30, Monday through Friday.

Any interested person may request in writing that his or her name be put on a mailing list to receive notice of intent to issue any permit to discharge to the surface waters of the state. Such request may be for the entire state or any geographic area of the state and shall clearly state in writing the name and mailing address of the interested person and the area for which notices are requested

### **PUBLIC COMMENT**

Pursuant to a petition requesting a public hearing on the application, the Department hereby gives notice of its intent to hold a public hearing on the application.

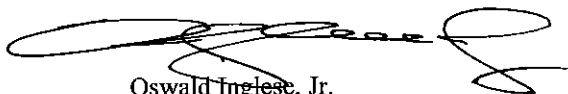
The Department will hold a public hearing at the following time and place to receive comments from the public on the application:

December 13, 2016, 6:00 pm until all present have been heard;  
Burnham School, 80 Main Street South, Bridgewater, CT.

The Department will continue the hearing for receipt of evidence starting at the following time and place:  
December 19, 2016, 10:00 am;  
Russell Room, Connecticut Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT.

Members of the public should check the DEEP Calendar of events on the DEEP website ([www.ct.gov/deep/calendar](http://www.ct.gov/deep/calendar)) for any alterations to this hearing schedule, including additional dates and cancellation.

**The Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer. Persons with a disability who may need information in an alternative format should contact the ADA Coordinator at 860-424-3194 or at [DEEP.HRmed@CT.Gov](mailto:DEEP.HRmed@CT.Gov). Persons who are limited English proficient who may need information in another language should contact the Title VI Coordinator at (860) 424-3035 or at [DEEP.aaoffice@ct.gov](mailto:DEEP.aaoffice@ct.gov). Persons who are hearing impaired should call the State of Connecticut relay number 711. Discrimination complaints should be filed with the Title VI Coordinator.**



Oswald Inglese, Jr.  
Director  
Water Permitting and Enforcement Division  
Bureau of Materials Management and Compliance Assurance

Dated:

**NOV 04 2016**