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Affirmative Action/Equal Opportunity Employer

UIC PERMIT

issued to

Essex Glen, LLC 942 Main Street Hartford, CT 06103

Location Address: Essex Glen Bokum Road

Essex, CT 06426

Permit ID: UI0000512

Permit Expires: June 07, 2028

Watershed: Falls River

Basin Code: 4019

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) Essex Glen, LLC, ("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
- (i) Public Hearings
- (k) Submission of Plans and Specifications. Approval.
- (1) 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) 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.
- (F) 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 thirty (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.
- (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 RCSA.
- (I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the CGS).

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 permit issuance.
 - "Maximum Concentration", in the context of this permit, is defined as the maximum concentration at any time as determined by a grab sample.
 - "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.

SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that the installation of a new system will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 201503010 received on April 29, 2015 for permit issuance and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge a maximum flow of seven thousand eight hundred (7,800) gallons per day of domestic sewage in accordance with the provisions of this permit, including subparagraphs 1 and 2 below, 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.
 - 1. Upon permit issuance, the Permittee is only authorized to discharge a maximum flow of three hundred (300) gallons per day of domestic sewage to the subsurface sewage disposal system serving Unit 14. The permittee shall not initiate a discharge to any other subsurface sewage system until it has complied with subparagraph 2 immediately below.
 - 2. Each subsurface sewage disposal system shall be constructed in accordance with the Approved Plans and Specification's dated August 23, 2016. The Permittee shall submit record drawings, for the Commissioner's review and written approval, documenting that each subsurface sewage disposal system has been constructed in accordance with such approval. In addition, the Permittee shall include a written request to discharge to such subsurface sewage disposal system with the record drawing. The Permittee shall not discharge to the subsurface sewage disposal system until written approval from the Commissioner has been granted pursuant to this paragraph.
- (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 22a-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 and as outlined in the associated operation and maintenance manual. This includes but is not limited to the SoilAir System and any other equipment necessary for the optimal removal of pollutants. The Permittee shall neither bypass nor 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 the specific terms and conditions listed in this permit. The discharges are restricted by, and shall be monitored in accordance with the Table A, which is incorporated into this permit as Attachment 1.
- (G) 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.
- (H) The Permittee shall perform ground water monitoring in accordance with Table B, which is incorporated into this permit as Attachment 2. The requirement that the monitoring plan be performed shall be included in the public offering statement, condominium bylaws, and the rules and regulations adopted thereto.
- (I) The monitoring and sampling required within this permit is the 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.
- 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 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. 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

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:

address or by email at deep.netdmr@ct.gov:

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.
- (f) Copies of all hard-copy DMRs shall be submitted concurrently to the local Water Pollution Control Authority (hereinafter "WPCA").

SECTION 6: COMPLIANCE SCHEDULE

- (A) On or before seven (7) days after issuance of this permit, the Permittee shall record on the land records of the Town of Essex 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 Essex.
- (B) 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 Essex. 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 on the land records in the Town of Essex.

This permit is hereby issued on June 8, 2018

Robert E. Kaliszewski

Deputy Commissioner

Department of Energy and Environmental Protection

cc: Town of Essex Health Department DMR

ATTACHMENT 1

	BLE A D MAINTENANCE REQUIREMENTS		
Discharge Serial No.: 302-1 through 302-26	Monitoring Location: S		
Wastewater Description: Domestic Sewage			
Average Daily Flow (per system): 200 gallons per day	Maximum Daily Flow (per system): 300 gallons per day		
Inspection, Monitoring, or Maintenance	Minimum Frequency		
Depth of sludge in septic tanks	During pump-out		
Pump out septic tanks	Annually		
Mechanical inspection of septic tank effluent filter	During pump-out		
Clean septic tank effluent filter	During pump-out		
Water meter readings of water usage	Weekly		
Visual inspection of distribution chambers	Quarterly		
Visual inspection of surface condition of leaching	Quarterly		
fields	<u> </u>		
Depth of ponding in leaching fields	Quarterly		
Mow grass over leaching fields	3 times per year		

ADDITIONAL NOTES:

- 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.
- 2. The Town of Essex 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 Town of Essex Director of Health.

ATTACHMENT 2

	ABLE B FER MONITO	RING			
Discharge Serial No. 301-2		Monitoring Location: GW - downgradient			
Groundwater Monitoring Location No.: MW-1, MW-2, MW-3	Description: Downgradient monitoring well				
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

<u>APPLICATIO</u>	<u>N No.</u> : 201503	010 PERN	<u>/IIT No.</u> : UI0000)512		•
CONTACT PE	PERMITTEE: DRESS: 942 M ERSON: Mark	: Essex Glen, I Main Street, Ha S. Levine	.LC irtford CT 06103 m Road, Essex, 0		26	
PERMIT TYP New (X)		e <u>()</u> M	Iodification ()		Subsec	ction-e ()
PERMIT DUR 5 YEAR ()		AR <u>(X</u>)	30 YEAR (_)			
OWNERSHIP Private (X)		State ()	Municipal(town	n only)(_	<u>)</u> Ot	ther public()
DISCHARGE Point ()	CATEGORIZ Non-point <u>(X)</u>		<u>. </u>			
NPDES ()	Pretreat (_)	Groun	d Water(UIC) (X	Ω	Ground Wa	ater (Other) ()
Major ()	Significant Mir	nor () Minor	<u>(X)</u>			
UIC PERMIT Total Wells	<u>INFORMATI</u> 2 <u>6</u>	<u>ON</u> Well Type <u>5V</u>	<u>V12</u>			
DEEP STAFF Lauren Jones	ENGINEER/A	<u>ANALYST</u>				
NATURE OF I Essex Glen is a	BUSINESS GI proposed resid	ENERATING ential condomi	DISCHARGE nium developme	ent consis	sting of 26	two bedroom units
Each unit will b	e provided with	n a subsurface	TION (by DSN) sewage disposal a flow for the site i	system c		
COMPLIANCE Pollution Preven		YES (7	Water Cons	servation (_)
Permit Steps ()		Water Quality	Requirement (_)	I	Remediatio	on ()
Audit Language	Ω	Other (X)				

DATA TRACKING AND TECHNICAL FACT SHEET

RE:	SOURCES USED TO DRAFT PERMIT
	Federal Effluent Limitation Guideline 40CFR
	name of category
	Performance Standards
_	Federal Development Document
	name of category
	Treatability Manual
X	Department File Information
37	C. Minut Water Ovelity Standards
X	Connecticut Water Quality Standards
_	Anti-degradation Policy
_	Coastal Management Consistency Review Form
	Other - Explain
BA	SIS FOR LIMITATIONS, STANDARDS OR CONDITIO
$\overline{\mathbf{v}}$	Rest Judgement (See Other Comments)

DNS

- X Case by Case Determination (See Other Comments)

OTHER COMMENTS

The Department received a prior development proposal from Landmark Interests, LLC (Application No. (200702695) that consisted of a total design flow of 16,500 gallons per day and a Bioclere pretreatment system prior to being discharged to a subsurface sewage disposal system. This application was public noticed on May 13, 2008 and was recommended for Final Determination, but the developer abandoned the project.

Essex Glen, LLC has submitted a new development proposal (Application No. 201503010) for the site consisting of a total design flow of 7,800 gallons per day and the use of SoilAir Systems.

The draft permit requirement (Table A) for maintaining electrical generators onsite to keep the SoilAir Systems running in the event of a temporary power loss has been removed from the permit. The Applicant has satisfactorily demonstrated to the Department that, without the aeration provided by the SoilAir System, onsite systems can discharge up to 108 days before nitrogen in the groundwater would reach the drinking water standard of 10 mg/l.

Condition No. 3(B) of the permit was revised to reflect the Applicant's approach to phased construction. At the time of permit issuance only unit no. 14 has been constructed and is ready to discharge. This condition will require the submittal of as-built drawings for each unit and an approval to discharge from the Department.

PERMIT FEES

Discharge Code 312000a

Representing DSN <u>302-1 through 302-26</u>

Annual Fee \$1100

DATA TRACKING AND TECHNICAL FACT SHEET

PROJECT HISTORY

Application received on April 29, 2015
Notice of Sufficiency signed June 22, 2015
Tentative Determination was published February 5, 2016 in the Hartford Courant
Final Determination signed March 24, 2016
Plans and Specifications Approval issued August 23, 2016