



UIC PERMIT MODIFICATION

issued to

D.G.G. Properties Co., Inc.
P.O. Box 688
Westbrook, CT 06498

Location Address:
Water's Edge Resort & Spa
1525 Boston Post Road
Westbrook, CT 06498

Permit ID: UI0000087

Permit Expires: October 10, 2026

Watershed: South Central Shoreline

Basin Code: 5000

SECTION 1: GENERAL PROVISIONS

- (A) This permit is modified and reissued in accordance with section 1421 of the Federal Safe Drinking Water Act 42 USC 300h et. seq. and section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended.
- (B) D.G.G. Properties Co., Inc., ("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 and 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 discharges 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.

- (B) Oils, greases, industrial or commercial wastes, toxic chemicals, wastes from water treatment systems, 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.
- (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 all 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 F 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
- (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) The Permittee shall ensure that recycled water is colored blue at all times.
- (J) 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.
- (K) 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.
- (L) 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 3 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.
- (M) The Permittee shall monitor inspect and maintain the treatment facilities in accordance with Tables G through I, which are incorporated into this permit as Attachment 2.
- (N) The Permittee shall perform ground water monitoring in accordance with Tables J through K, which are incorporated into this permit as Attachment 3.
- (O) 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

- (J) 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 section 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 February.

"Average Monthly Discharge Limitation" means the highest allowable average of all grab samples taken during any calendar month.

"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.

"Twice per month" when used as a sample frequency shall mean two samples per calendar month collected no less than 12 days apart.

SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner has made a final determination and found that the continuance and modification of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on **Application No. 200900715** for permit reissuance and modification received on March 9, 2009 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge a maximum flow of 36,473 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 which 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.

acceptable results for the parameters being monitored as required by the Operation and Maintenance Manual approved by the Commissioner.

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

- (A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved by the Environmental Protection Agency pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit. 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 reported to the Commissioner within 30 days of the exceedance. Resampling for permit violations 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 any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which 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 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 and notarized copy of the *Connecticut DEEP NetDMR Subscriber Agreement* to the Department.

(b) *Submittal of Reports Using NetDMR*

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

**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. The DMR shall also include a detailed explanation of any violations of the limitations specified and corrective actions performed, and a schedule for the completion of any corrective actions remaining.

**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

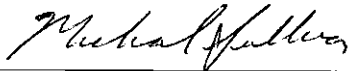
- (A) On or before seven (7) days after issuance of this permit, the Permittee shall record a copy thereof on the land records in the Town of Westbrook. On or before one (1) month after issuance of this permit, the Permittee shall submit written verification to the Commissioner that this permit has been recorded in the land records in the Town of Westbrook.
- (B) Starting on or before six (6) months after the date of issuance of this permit, and continuing thereafter, 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 which 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 and performance logs/records; equipment specifications and 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.

- (C) A copy of each audit shall be submitted concurrently to the local WPCA and to the local Health Department.

This permit is hereby issued on *October 11, 2016*



Michael Sullivan
Deputy Commissioner
Department of Energy and Environmental Protection

cc: Westbrook Health Department
Alvin Wolfgram, P.E.
DMR

ATTACHMENT 1

TABLE A			
Discharge Serial No. 301-2A		Monitoring Location: G	
Wastewater Description: Domestic Sewage Influent to Pretreatment System			
Monitoring Location Description: Equalization Tank Sump			
Maximum Daily Flow: 45,000 gallons per day			
PARAMETER	INSTANTANEOUS MONITORING		
	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

TABLE B			
Discharge Serial No. 301-2B		Monitoring Location: G	
Wastewater Description: Laundry Wastewater Influent to Pretreatment System			
Monitoring Location Description: Laundry Waste Storage Tank			
Maximum Daily Flow: 12,000 gallons per day			
PARAMETER	INSTANTANEOUS MONITORING		
	Units	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	Grab	Monthly
Total Suspended Solids	mg/l	Grab	Monthly
Total Kjeldahl Nitrogen	mg/l	Grab	Monthly
Ammonia Nitrogen	mg/l	Grab	Monthly
Total Dissolved Solids	mg/l	Grab	Monthly

TABLE C			
Discharge Serial No. 301-2C		Monitoring Location: J (Intermediate Process)	
Wastewater Description: Domestic Sewage Pretreatment System			
Monitoring Location Description: Zenon Process Tank			
Maximum Daily Flow: 45,000 gallons per day			
PARAMETER	INSTANTANEOUS MONITORING		
	Units	Sample Type	Sample Frequency
pH	SU	Grab	Weekly
Temperature	° F	Grab	Weekly
Alkalinity	mg/l	Grab	Weekly

TABLE D					
Discharge Serial No. 301-2D			Monitoring Location: J (Intermediate Process)		
Wastewater Description: Laundry Wastewater					
Monitoring Location Description: Water Storage Tank					
PARAMETER	FLOW/TIME BASED MONITORING				
	Units	Average Monthly Limit	Maximum Daily Flow Limit	Sample Type	Sample Frequency
Flow Rate ¹	gpd	--	12,000	Daily flow	Continuous
PARAMETER	INSTANTANEOUS MONITORING				
	Units	Average Monthly Limit	Maximum Concentration	Sample Type	Sample Frequency
Biochemical Oxygen Demand	mg/l	20	30	Grab	Monthly
Total Suspended Solids	mg/l	20	30	Grab	Monthly
Total Nitrogen	mg/l	n/a	n/a	Grab	Monthly
Ammonia	mg/l	n/a	n/a	Grab	Monthly
Nitrate Nitrogen	mg/l	n/a	n/a	Grab	Monthly
Nitrite Nitrogen	mg/l	n/a	n/a	Grab	Monthly
Total Kjeldahl Nitrogen	mg/l	n/a	n/a	Grab	Monthly
Total Phosphorus	mg/l	n/a	n/a	Grab	Monthly
Fecal Coliform	col/100ml	4	n/a	Grab	Weekly
FOOTNOTES:					
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.					
ADDITIONAL NOTES:					
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.					

TABLE E					
Discharge Serial No. 301-2E			Monitoring Location: 1		
Wastewater Description: Domestic Sewage—Pretreated Effluent					
Monitoring Location Description: Water Storage Tank					
PARAMETER	FLOW/TIME BASED MONITORING				
	Units	Average Monthly Limit	Maximum Daily Flow Limit	Sample Type	Sample Frequency
Flow Rate ¹	gpd	--	45,000	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	n/a	10	Grab	Twice per month
Ammonia	mg/l	n/a	--	Grab	Twice per month
Nitrate Nitrogen	mg/l	n/a	--	Grab	Twice per month
Nitrite Nitrogen	mg/l	n/a	--	Grab	Twice per month
Total Kjeldahl Nitrogen	mg/l	n/a	--	Grab	Twice per month
Total Phosphorus	mg/l	n/a	15	Grab	Twice per month
pH	SU	n/a	--	Grab	Twice per month
Fecal Coliform	col/100ml	4	n/a	Grab	Weekly
Ethanol	mg/l	n/a	n/a	Grab	Quarterly
FOOTNOTES:					
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.					
ADDITIONAL NOTES:					
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.					

TABLE F					
Discharge Serial No. 301-2F			Monitoring Location: 1		
Wastewater Description: Domestic Sewage Pretreatment System—Discharge to Engineered Leaching System					
Monitoring Location Description: Water Storage Tank					
PARAMETER	FLOW/TIME BASED MONITORING				
	Units	Average Daily Flow Limit	Maximum Daily Flow Limit	Sample Type	Sample Frequency
Flow Rate ¹	gpd	--	28,944	Daily flow	Continuous

ATTACHMENT 2

TABLE G	
Discharge Serial No. 301-2	
Wastewater Description: Domestic Sewage	
Average Daily Flow: 19,296 gallons per day	Maximum Daily Flow: 28,944 gallons per day
<u>INSPECTION, MONITORING, or MAINTENANCE</u>	<u>MINIMUM FREQUENCY</u>
Depth of sludge in septic tank	During pump-out
Pump out septic tank	Annually
Pump out grease trap	Quarterly
Mechanical inspection of septic tank baffles	During pump-out
Mechanical inspection of grease trap baffles	During pump-out
Mechanical inspection of pump station	Quarterly
Pump out pump chamber	Every 5 years
Pump out equalization tank	As needed
Water meter readings of daily water usage	Quarterly
Visual inspection of Zenon systems	Monthly
Mechanical inspection of alarms	As needed
Mechanical inspection of ethanol feed systems	Monthly
Visual inspection of UV-disinfection systems	Monthly
Clean UV bulbs	Monthly
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching field	Quarterly
Depth of ponding in leaching field	Quarterly
Mow grass over leach field	3 times per year
ADDITIONAL NOTES:	
<ol style="list-style-type: none"> 1. All inspection, monitoring and maintenance required in this table shall be reported at least annually by the end of each January as an attachment to the December DMR. 2. The Westbrook Health Department 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 Westbrook Health Department Director of Health. 	

TABLE H	
Discharge Serial No. 302-2	
Wastewater Description: Domestic Sewage	
Average Daily Flow: 3,780 gallons per day	Maximum Daily Flow: 5,670 gallons per day
<u>INSPECTION, MONITORING, or MAINTENANCE</u>	<u>MINIMUM FREQUENCY</u>
Depth of sludge in septic tank	During pump-out
Pump out septic tank	Annually
Pump out grease trap	Quarterly
Mechanical inspection of septic tank baffles	During pump-out
Mechanical inspection of grease trap baffles	During pump-out
Mechanical inspection of pump station	Quarterly
Pump out pump chamber	Every 5 years
Test run of emergency generator	Quarterly
Water meter readings of daily water usage	Quarterly
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching field	Quarterly
Depth of ponding in leaching field	Quarterly
Mow grass over leach field	3 times per year
ADDITIONAL NOTES:	
<ol style="list-style-type: none"> 1. All inspection, monitoring and maintenance required in this table shall be reported at least annually by the end of each January as an attachment to the December DMR. 2. The Westbrook Health Department 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 Westbrook Health Department Director of Health. 	

TABLE I	
Discharge Serial No. 303-2	
Wastewater Description: Domestic Sewage	
Average Daily Flow: 1,230 gallons per day	Maximum Daily Flow: 1,859 gallons per day
<u>INSPECTION, MONITORING, or MAINTENANCE</u>	<u>MINIMUM FREQUENCY</u>
Depth of sludge in septic tank	During pump-out
Pump out septic tank	Annually
Mechanical inspection of septic tank baffles	During pump-out
Mechanical inspection of pump station	Quarterly
Pump out pump chamber	Every 5 years
Water meter readings of daily water usage	Quarterly
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching field	Quarterly
Depth of ponding in leaching field	Quarterly
Mow grass over leach field	3 times per year
ADDITIONAL NOTES:	
<ol style="list-style-type: none"> 1. All inspection, monitoring and maintenance required in this table shall be reported at least annually by the end of each January as an attachment to the December DMR. 2. The Westbrook Health Department 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 Westbrook Health Department Director of Health. 	

ATTACHMENT 3

TABLE J GROUNDWATER MONITORING			
DISCHARGE SERIAL NO. 301-A, 302-A, 303-A, 304-A, 305-A, 306-A		MONITORING LOCATION: GW	
GROUND WATER MONITORING WELL NO.: M1, M2, M3, M4, M5, M6		DESCRIPTION: Downgradient monitoring wells	
PARAMETER	UNITS	MINIMUM FREQUENCY OF SAMPLING	SAMPLE TYPE
Coliform, Fecal	col/100ml	Quarterly	Grab
Groundwater Depth (Standard depth below grade)	Ft, in	Quarterly	Instantaneous
Nitrogen, Ammonia	mg/l	Quarterly	Grab
Nitrogen, Nitrate	mg/l	Quarterly	Grab
Nitrogen, Nitrite	mg/l	Quarterly	Grab
Nitrogen, Total Kjeldahl	mg/l	Quarterly	Grab
Nitrogen, Total	mg/l	Quarterly	Grab
pH	S.U.	Quarterly	Grab
Phosphorus, Total Dissolved	mg/l	Quarterly	Grab

TABLE K GROUNDWATER MONITORING			
DISCHARGE SERIAL NO. 301-B, 302-B, 303-B, 304-B		MONITORING LOCATION: S	
GROUND WATER MONITORING WELL NO.: B1, B2, B3, B4		DESCRIPTION: Monitoring wells in system	
PARAMETER	UNITS	MINIMUM FREQUENCY OF SAMPLING	SAMPLE TYPE
Groundwater Depth (Standard depth below grade)	Ft, in	Quarterly	Instantaneous

DATA TRACKING AND TECHNICAL FACT SHEET

PERMIT #: UI0000087 **APPLICATION #:** 200900715

DISCHARGER NAME AND ADDRESS DATA

Permittee: D.G.G. Properties Co., Inc.

Mailing Address:

Street: P.O. Box 688

City: Westbrook ST: CT Zip: 06498

Contact Name: Steve
Cherhoniak

Location Address:

Street: 1525 Boston Post Road

City: Westbrook St. CT Zip: 06498

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 3 Well Type 5W11 and 5W12

PERMIT FEES

DISCHARGE CODE 312000a REPRESENTING DSN 301-2

DISCHARGE CODE 312000a REPRESENTING DSN 302-2

DISCHARGE CODE 312000a REPRESENTING DSN 303-2

ANNUAL FEE \$1,110.00

PERMIT No. UI0000087

DEP STAFF ENGINEER/ANALYST

Ramona Goode [w/ updates: Michel Hart & Heather Wildman]

PERMIT TYPE

New() Reissuance() Modification() Subsection-e()

NATURE OF BUSINESS GENERATING DISCHARGE

The business comprises a hotel resort and spa with banquet and conference facilities.

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

Total design flow for the site is 36,473 gallons per day.

DSN 301-2 represents the existing alternative sewage treatment process consisting of a grease trap, septic tank, pump chamber, flow equalization tank, two Zenon Municipal Wastewater Treatment and Recycling Systems, and an engineered leaching system. The Zenon Systems consist of aerobic and anoxic biological treatment processes, membrane filtration, and ultraviolet disinfection. Laundry wastewaters are piped separately and pretreated by one of the Zenon systems, which has a process capacity of 12,000 gallons per day. Domestic sewage is pretreated by the larger of the two Zenon system and has a process capacity of 45,000 gallons per day. A maximum of 28,944 gallons per day of pretreated effluent may be discharged to the engineered leaching system, and any remaining pretreated effluent is returned within the Zenon system and/or reused as flush water.

DSN 302-2 represents the existing conventional subsurface sewage treatment and disposal system serving the spa and resort. The design flow is this system is 5,670 gallons per day. The system consists of a grease trap, septic tank, and pump chamber followed by an engineered leaching field.

DSN 303-2 represents the conventional subsurface sewage treatment and disposal system serving the new villas. The design flow is this system is 1,859 gallons per day. The system consists of a septic tank and pump chamber followed by an engineered leaching field.

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

The alternative treatment system serving DSN 301-2 is required to meet limits on BOD, TSS, bacteria, and total nitrogen and phosphorus prior to being discharged to an engineered leaching field.

D.G.G. Properties Co., Inc. proposes to increase design flow for the site from 33,900 gallons per day to 36,473 gallons per day to account for the construction of new villas and the addition of a new conventional subsurface sewage treatment and disposal system (i.e., DSN 303-2).

In 2012, following Final Determination, the facility began experiencing elevated bacteria levels in downgradient groundwater monitoring wells. These exceedances in groundwater continued intermittently through 2015, then improved significantly in 2016 in response to ongoing operational improvements. Low level bacteria exceedances were also observed in pretreated effluent from the Zenon system prior to February 2016.

In addition, the facility had been experiencing nutrient exceedances since 2013. However, proper pathogen renovation and nutrient removal has now been occurring for most of 2016. In order to monitor these improvements in system performance, the language of the draft permit has been modified to require that the first biennial compliance audit (Section 6 paragraph (B)) be performed within six months after the issuance of the permit to further assess the performance of the alternative wastewater treatment system.

PROJECT HISTORY

Application received on March 9, 2010.

Notice of Sufficiency signed on April 3, 2009.

Tentative Determination signed on May 3, 2011, published on May 5, 2011.

Final Determination signed on June 8, 2011.

Approval to construct signed on June 13, 2011.

As-built plans received on May 28, 2014.

Elevated levels of bacteria and nutrients observed 2014 - 2015; Effective system performance confirmed Sept. 2016.

WATER'S EDGE INN & RESORT - DGG PROPERTIES CO., INC

Date	Parameter	Location	Unit	Avg Limit	Max Limit	Max Report
Nov-2012	Fecal Coliform	GW - MW #1	cfu/100mL		present	18
May-2013	Fecal Coliform	GW - MW #1	cfu/100mL		present	5
Aug-2013	Fecal Coliform	GW - MW #1	cfu/100mL		present	8
Aug-2015	Fecal Coliform	GW - MW #1	cfu/100mL		present	12

Key:	2012
	2013
	2014
	2015
	2016

Aug-2014	Fecal Coliform	GW - MW #2	cfu/100mL		present	3
Aug-2015	Fecal Coliform	GW - MW #2	cfu/100mL		present	64
Nov-2015	Fecal Coliform	GW - MW #2	cfu/100mL		present	12
Feb-2016	Fecal Coliform	GW - MW #2	cfu/100mL		present	4

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Aug-2014	Fecal Coliform	GW - MW #3	cfu/100mL		present	2
Nov-2015	Fecal Coliform	GW - MW #3	cfu/100mL		present	8

Aug-2013	Fecal Coliform	GW - MW #4	cfu/100mL		present	4
Aug-2014	Fecal Coliform	GW - MW #4	cfu/100mL		present	1
Aug-2015	Fecal Coliform	GW - MW #4	cfu/100mL		present	16
Nov-2015	Fecal Coliform	GW - MW #4	cfu/100mL		present	44

Nov-2012	Fecal Coliform	GW - MW #5	cfu/100mL		present	3
Aug-2014	Fecal Coliform	GW - MW #5	cfu/100mL		present	1
Aug-2015	Fecal Coliform	GW - MW #5	cfu/100mL		present	42
Nov-2015	Fecal Coliform	GW - MW #5	cfu/100mL		present	8

Feb-2013	Fecal Coliform	GW - MW #6	cfu/100mL		present	2
May-2013	Fecal Coliform	GW - MW #6	cfu/100mL		present	3
Aug-2013	Fecal Coliform	GW - MW #6	cfu/100mL		present	6
May-2014	Fecal Coliform	GW - MW #6	cfu/100mL		present	1
Aug-2015	Fecal Coliform	GW - MW #6	cfu/100mL		present	4
Nov-2015	Fecal Coliform	GW - MW #6	cfu/100mL		present	36

Mar-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		8
Apr-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		11.4
June-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		8.75
Aug-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		32.75
Sept-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		4.5
Oct-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		9.6
Nov-2015	Fecal Coliform	Laundry Effluent	col./100mL	4		11

Jun-2014	Fecal Coliform	Hotel Effluent	col./100mL			8
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Mar-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		4.75
June-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		6.75
July-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		17.2
Aug-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		6.25
Oct-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		9.2
Nov-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		16.25
Dec-2015	Fecal Coliform	Hotel Effluent	col./100mls.	4		21.4
Jan-2016	Fecal Coliform	Hotel Effluent	col./100mls.	4		19.25
Feb-2016	Fecal Coliform	Hotel Effluent	col./100mls.	4		39.25

Nov-2013	Total Nitrogen	Hotel Effluent	mg/L		10	12.67
Dec-2013	Total Nitrogen	Hotel Effluent	mg/L		10	12.49
June-2015	Total Nitrogen	Hotel Effluent	mg/L		10	10.57
Aug-2015	Total Nitrogen	Hotel Effluent	mg/L		10	16.6
Sept-2015	Total Nitrogen	Hotel Effluent	mg/L		10	11.78

Sept-2013	Total Phosphorus	Hotel Effluent	mg/L		15	15.97
Oct-2013	Total Phosphorus	Hotel Effluent	mg/L			16.58
Nov-2013	Total Phosphorus	Hotel Effluent	mg/L			16.21