

UIC PERMIT

Issued to

Shoreline Plaza, LLC
C/o Brooks Proprieties, Inc.
1169 Main Street, Suite 5
Branford, CT 06405

Location Address:
900 Boston Post Road
Guilford, CT 06437

And

Big Y Foods, Inc.
2145 Roosevelt Avenue
Springfield, MA 01104

Permit ID: UI0000390
Watershed: Sluice Creek
Basin Code: 5109

Issuance Date: December 18, 2020
Effective Date: January 1, 2021
Permit Expires: December 31, 2030

SECTION 1: GENERAL PROVISIONS

- (A) This permit is reissued 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) Shoreline Plaza LLC and Big Y Foods, Inc., (“Permittees”), 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 Permittees 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 Permittees 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 Permittees 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 Permittees 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(s) 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 Permittees 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.
- (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 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.

“Average Monthly Limit” 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.

“Range During Month” or “RDM” means the lowest and the highest values of all of the monitoring data for the reporting month.

“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.

“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”, means the average monthly concentration of the current month’s samples averaged with the average monthly concentration from each of the previous eleven months.

SECTION 3: COMMISSIONER’S DECISION

- (A) The Commissioner has made a final determination and found that the continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on Application No.: 201902739 for permit reissuance received on February 11, 2019 and the administrative record established in the processing of that application.
- (B) From the effective date of this permit, for a term not to exceed ten years and until this permit expires or is modified or revoked, the Commissioner hereby authorizes the Permittees to discharge a maximum flow of 8,600 gallons per day of domestic sewage in accordance with the terms and conditions of this permit, the above referenced application, and all modifications and approvals issued by the Commissioner or the Commissioner’s authorized agent for the discharges and/or activities authorized by, or associated with, this permit following the issuance date of 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 22a-461 of the CGS. The Commissioner in no way certifies the safety or effectiveness of any sewage system additive.
- (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.
- (C) The Permittees shall assure that groundwater affected by the subject discharge shall conform to the Connecticut Water Quality Standards.
- (D) The Permittees 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 recycle pumping system, Bioclere advanced pretreatment, aeration equipment, aeration tank, mixing equipment, anoxic tank, chemical feed systems, effluent filters or any other process equipment necessary for the optimal removal of pollutants. The Permittees shall not bypass or fail to operate any of the approved equipment or processes without the written approval of the Commissioner.
- (E) The discharge shall not exceed and shall otherwise conform to the specific terms and conditions listed in this permit. The discharge is restricted by, and shall be monitored in accordance with the Tables A and B, which are incorporated into this permit as Attachment 1.
- (F) 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 in accordance with this permit. The Permittees shall report pH values, specifically maximum and minimum, for each day of sample collection.
- (G) The Permittees 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.
- (H) 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.
- (I) 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.
- (J) Unless a different classification of certified operator is required under a separate written approval issued by the Commissioner, the Permittees 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 Permittees 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.
- (K) The Permittees shall monitor, inspect and maintain the treatment facilities in accordance with Table C, which is incorporated into this permit as Attachment 2.

- (L) The Permittees shall perform ground water monitoring in accordance with Table D, which is incorporated into this permit as Attachment 3.
- (M) 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.
- (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 Permittees 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 Permittees 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:
Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittees 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 Permittees 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 Permittees 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 Permittees 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 Permittees 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 the Permittees begin submitting reports using NetDMR, they will no longer be required to submit hard copies of DMRs to the Department. The Permittees 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 Permittees are 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 the Permittees 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 Permittees submit 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. 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 thirty (30) days after the date of issuance of this permit, The Permittees shall retain one or more qualified consultants that are professional engineers licensed to practice in Connecticut to prepare the documents and implement or oversee the actions required in paragraphs 6(B) and 6(C) below of this permit and shall, by that date, notify the Commissioner in writing of the identity of such consultants. The Permittees shall retain one or more qualified consultants acceptable to the Commissioner until this permit is fully complied with and, within ten (10) days after retaining any consultant other than one originally identified under this paragraph, the Permittees shall notify the Commissioner in writing of the identity of such other consultant. Nothing in this paragraph shall preclude the Commissioner from finding a previously acceptable consultant unacceptable.
- (B) On or before sixty (60) days after the date of issuance of this permit, the Permittees shall: a) investigate the existing alternative sewage treatment system; b) evaluate the adequacy and effectiveness of the existing system to protect human health and the environment and to meet present and future wastewater treatment and disposal needs, including but not limited to the overall existing system design and performance of the leach field; and c) submit for the Commissioner's review and written approval, a comprehensive written report detailing the results of such investigation and evaluation. Such report shall address the adequacy of the existing system to provide effective on-site wastewater treatment and disposal and comply with the terms and conditions of this permit, and the potential impact of the existing system on human health and the environment both on-site and off-site, including but not limited to the potential extent and degree of soil, ground water and surface water pollution. Such report shall propose remedial actions ("remedial plan") to address all wastewater needs, including but not limited to a proposal for any necessary permanent repair to or replacement of the existing system to ensure adequate wastewater renovation and compliance with this permit, and a detailed work plan and schedule for performing the remedial plan and monitoring the effectiveness of the remedial plan.
- (C) Every two (2) years, on or before the anniversary date of the issuance of this permit, the Permittees 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.

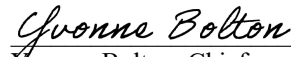
Each audit report shall include a description of all records and documents used in the evaluation, a

summary of compliance with permit terms and conditions, and detailed descriptions of all remedial actions taken or proposed to address each violation or deficiency discovered.

The 8-year anniversary audit report shall also include detailed findings from a physical inspection of each on-site sewage treatment and disposal system and an evaluation of the performance and operation of each such system. In the event of a system malfunction or failure, the Permittees shall prepare and submit a remedial plan for the Commissioner's review and written approval.

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 **December 18, 2020**.



Yvonne Bolton, Chief
Bureau Materials Management and Compliance Assurance
Department of Energy and Environmental Protection

YB:ald

cc: Local Health Dept.
DMR

ATTACHMENT 1

TABLE A				
Discharge Serial No. 301-2			Monitoring Location: G	
Wastewater Description: Domestic Sewage Influent				
Monitoring Location Description: Immediately After Septic Tank				
Average Daily Flow: 5,800 gallons per day			Maximum Daily Flow: 8,600 gallons per day	
INSTANTANEOUS MONITORING				
Parameter	Units	Average Monthly Limit	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
pH	SU	---	Grab	Twice per month
Oil & Grease	mg/l	---	Grab	Monthly
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 B					
Discharge Serial No. 301-2			Monitoring Location: 1		
Wastewater Description: Pretreated Domestic Sewage Effluent					
Monitoring Location Description: Pump chamber following the final settling tank					
FLOW/TIME BASED MONITORING					
Parameter	Units	Average Daily Flow Limit	Maximum Daily Flow Limit	Sample Type	Sample Frequency
Flow Rate (Average daily) ¹	gpd	5,800	8,600	Daily flow	Continuous
INSTANTANEOUS MONITORING					
Parameter	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 ²	---	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, Minimum (Day of Sampling)	S.U.	NA	6.0 - 9.0	Continuous	Continuous
pH, Maximum (Day of Sampling)	S.U.	NA	6.0 - 9.0	Continuous	Continuous
pH, Minimum Value of RDM	S.U.	NA	6.0 - 9.0	Continuous	Continuous
pH, Maximum Value of RDM	S.U.	NA	6.0 - 9.0	Continuous	Continuous
Methanol	mg/l	---	---	Grab	Twice per month
Alkalinity	mg/l	---	---	Grab	Twice per month
FOOTNOTES:					
1. For this parameter, the Permittees 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.					
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.					

ATTACHMENT 2

TABLE C INSPECTION, MONITORING AND MAINTENANCE REQUIREMENTS	
Discharge Serial No.: 301-2	Monitoring Location: S
Wastewater Description: Domestic Sewage	
Average Daily Flow: 5,800 gallons per day	Maximum Daily Flow: 8,600 gallons per day
Inspection, Monitoring, or Maintenance	Minimum Frequency
Depth of sludge in septic tanks	During pump-out
Pump out septic tanks	Annually
Pump out grease traps	Quarterly
Mechanical inspection of septic tank baffles	During pump-out
Mechanical inspection of grease trap baffles	During pump-out
Mechanical inspection of septic tank effluent filter	During pump-out
Clean septic tank effluent filter	During pump-out
Mechanical inspection of pump station	Quarterly
Pump out pump chamber	Every three years
Pump out equalization tank	Every three years
Test run of emergency generator	Quarterly
Water meter readings of water usage	Weekly
Visual inspection of BioClere system	Monthly
Visual inspection of anoxic chambers	Monthly
Visual inspection of denitrification filter	Monthly
Visual inspection of final settling tank	Monthly
Mechanical inspection of alarms	Monthly
Mechanical inspection of methanol feed system	Monthly
Mechanical inspection of alkalinity feed system	Monthly
Pump out sludge from settling tank	Every three years
Visual inspection of distribution chambers	Quarterly
Visual inspection of surface condition of leaching field	Quarterly
Depth of ponding in leaching field	Quarterly
ADDITIONAL NOTES:	
<ol style="list-style-type: none"> 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 Guilford 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 Guilford Director of Health. 	

ATTACHMENT 3

TABLE D GROUNDWATER MONITORING			
Discharge Serial No. 301 A, 301 B		Monitoring Location: GW; VG	
Groundwater Monitoring Location No.: DG-1 and UG-2		Description: Downgradient and upgradient monitoring wells	
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	Instantaneous
Total Dissolved Phosphorous	mg/l	Quarterly	Grab

DATA TRACKING AND TECHNICAL FACT SHEET

APPLICATION No.: 201902739

PERMIT No.: UI0000390

DISCHARGER NAME AND ADDRESS

APPLICANT/PERMITTEE: Big Y Foods, Inc. and Shoreline Plaza, LLC

MAILING ADDRESS:

Big Y Foods, Inc.
2145 Roosevelt Avenue
Springfield, MA 01104

Shoreline Plaza, LLC
1169 Main Street, Suite 5
Branford, CT 06405

CONTACT PERSON: Big Y Foods, Inc., Sandy Giancola, Phone No.: (413) 504-4702
Shoreline Plaza, LLC, Jamie Brooks, Phone No.: (203) 481-0788

LOCATION ADDRESS: Shoreline Plaza, 900 Boston Post Road, Guilford, CT 06437

PERMIT TYPE

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

PERMIT DURATION

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

OWNERSHIP CODE

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

DISCHARGE CATEGORIZATION

Point () Non-point (X) GIS # _____

NPDES () Pretreat (X) Ground Water (UIC) (X) Ground Water (Other) ()

Major () Significant Minor () Minor (X)

UIC PERMIT INFORMATION

Total Wells 1 Well Type 5W12

DEEP STAFF ENGINEER/ANALYST

Antoanela Daha

NATURE OF BUSINESS GENERATING DISCHARGE

Big Y Foods, Inc. and Shoreline Plaza, LLC, presently discharge 8,600 gallons per day of domestic sewage wastewaters to the groundwaters in the watershed of the Sluice Creek Watershed from the operations at Shoreline Plaza.

PROCESS AND TREATMENT DESCRIPTION (by DSN) AT(X) RECYCLE ()

DSN 301-2 represents the discharge from the existing alternative sewage treatment system consisting of grease traps, septic tanks and Bioclere advanced treatment followed by a leaching field.

COMPLIANCE SCHEDULE YES (X) NO ()

Pollution Prevention () Treatment Requirement () Water Conservation ()
Permit Steps () Water Quality Requirement () Remediation ()
Audit Language (X) Other (X)

DATA TRACKING AND TECHNICAL FACT SHEET

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

- Best Judgement (See Other Comments)
- Case by Case Determination (See Other Comments)

OTHER COMMENTS

Shoreline Plaza Shopping Center in Guilford comprises several small commercial retail stores, a Big Y Supermarket and a Walmart Store. Domestic sewage from the Big Y Supermarket and the small commercial retail stores is discharged through an alternative sewage treatment system primarily operated by Big Y. This alternative sewage treatment system was constructed in 2006 and was previously permitted for discharge in 2009. Domestic sewage from the Walmart Store is discharged through a separate alternative sewage treatment system primarily operated by Walmart and previously permitted for discharge in 2006. This second system is the subject of a separate pending wastewater discharge permit application #201603407, which is currently under technical review.

The alternative sewage treatment system serving Big Y Supermarket and the small commercial retail stores consists of grease traps, septic tanks and a Bioclere advanced biological trickling filter system for the treatment and removal of BOD, TSS and nitrogen prior to discharge to a subsurface leaching field. This alternative sewage treatment system ["ATS"] was designed and constructed to replace a persistently malfunctioning conventional septic system. In the first few years of ATS operation, wastewater discharges from the Bioclere biological treatment plant failed to consistently comply with permitted effluent limits. After a thorough investigation, it was determined that the main reason for the effluent limit exceedances involved the use of cleaning products containing quaternary ammonia. Quaternary ammonia can act as an inhibitor of biological treatment, diminishing the BOD removal and disrupting the nitrification process. This in turn led to in poor denitrification and, therefore, chronic exceedances of permitted effluent limits for BOD and nitrogen. In response, Big Y switched its practices to incorporate alternative cleaning chemicals and conducted an educational program with the smaller commercial retail stores to instruct those tenants/employees on the use of alternative cleaning chemicals and the need to minimize both use and discharge of cleaning products containing quaternary ammonia. These actions undertaken by Big Y resulted in substantial improvements in both effluent quality and permit compliance.

DATA TRACKING AND TECHNICAL FACT SHEET

Recent effluent monitoring results indicate good compliance with BOD and TSS limits. However, effluent monitoring results for nitrogen immediately following pretreatment are at times slightly elevated. Downgradient groundwater monitoring well data indicates that further nitrogen renovation occurs in the subsurface leaching area and satisfactory nitrogen reduction is sometimes achieved. Also important to note is that sources of groundwater nitrogen concentrations entering the site are attributable to neighboring development. This is evidenced by upgradient monitoring well data indicating slightly elevated nitrate levels entering the Shoreline Plaza site, and also the presence and proximity of other nearby conventional septic systems upgradient of Shoreline Plaza.

On September 25, 2019, representatives from DEEP, Guilford Health Department, Guilford WPCA, Big Y, Shoreline Plaza LLC met with the design engineer, treatment plant manufacturer and the operator to inspect the alternative sewage treatment system and discuss recent permit noncompliance, the potential need for upgrades to the biological treatment system and continued compliance monitoring of the treatment plant and groundwater quality. The draft permit includes a compliance schedule requiring an investigation of the existing alternative sewage treatment system and performance of any necessary system modifications at the facility to ensure full permit compliance.

The attached public notice was published in the New Haven Register newspaper on October 13, 2020. The Department has received the following written comments on the proposed action from Robert Sonnichsen, P.E., Waldo & Associates LLC, submitted via email on November 13, 2020. These comments are provided below in *italics*, immediately followed by the Department's response in normal text.

Comments Received on November 13, 2020 from Robert Sonnichsen, P.E.:

Due to the presence of grease traps and a large septic tank that are regularly pumped and maintained the system has not experienced any significant oil & grease in the wastewater influent stream. As a result we request that the influent sampling frequency be reduced from twice per month to once per month.

The advanced pretreatment system includes multiple pumps and baffled tanks that are continuously inspected by the system operators. Any oil & grease in the treatment system would be identified well before the effluent discharge sampling location. There has never been any oil & grease identified in the system effluent during its entire operating history. As a result we request that the requirement for sampling oil & grease in the system effluent, as shown in Table B be eliminated.

The Department acknowledges that the existing grease trap and septic tank are conservatively sized and provide significantly more than twenty four hours of retention time, exceeding both the Department technical guidelines and the Public Health Code Technical Standards for oil and grease removal. The alternative sewage treatment system is operated by a certified operator, in accordance with RCSA Sections 22a-416-1 through Section 22a-416-10, and routine cleaning practices for the grease trap and septic tank are in place to ensure that any oil & grease is adequately removed from the grease trap and septic tank prior to further biological treatment. In the Department's view, confirmatory monitoring for oil & grease is necessary prior to such biological treatment, but is not necessary after full biological treatment. The Department supports a minimum sampling frequency of monthly to confirm consistent performance of the grease trap and septic tank.

Based on this information and analysis, the Department has reduced the sampling frequency for oil and grease immediately after the grease trap and septic tank from Twice Per Month to Monthly in Table A: [i.e., Domestic Sewage Influent Monitoring Location Description: Immediately After Septic Tank]. In addition, the Department has also removed the requirement in Table B to monitor oil & grease in the final pretreated effluent.

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PERMIT FEES

Discharge Code 312000a

Representing DSN 301-2

Annual Fee \$1,110

PROJECT HISTORY

Application received on February 11, 2019

Notice of Sufficiency issued on June 24, 2019

Notice of Tentative Decision on October 13, 2020

Comments Received on November 13, 2020