

A large, faded circular logo of the Narragansett Bay Commission is centered in the background. It features a stylized landscape with a sun or moon rising over a body of water, with hills in the foreground.

Narragansett Bay Commission

Consumption Billing for a Brewery

Kerry M. Britt
Pretreatment Manager

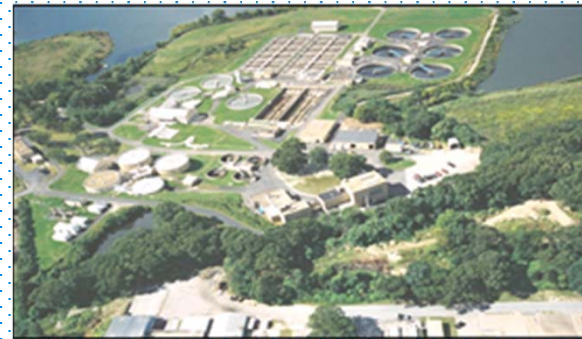
May 16, 2018

Narragansett Bay Commission

- Own and operate the two largest POTWs in RI
- Service 10 cities and towns
- 1,788 permitted users
- 70 SIUs



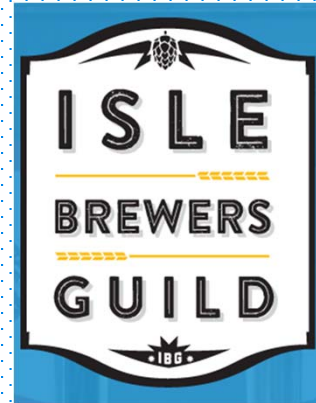
Field's Point



Bucklin Point

Breweries

- 🍺 Currently have 7 permitted breweries
- 🍺 1 Large scale
- 🍺 4 Craft brewers
- 🍺 2 Brew Pubs



Isle Brewers Guild

“Isle Brewers Guild works with established mid to large-size craft breweries looking to expand their capacity, sales and distribution. Isle Brewers Guild is a Partner Brewery, where brewers will brew their beer under the care and supervision of their own brewmaster, in a state-of-the-art facility offering a wide range of brewing and packaging services.


Our goal is to provide for our partner brewers an efficient brewing solution with better control and customer service.”

Devin Kelly – Partner Isle Brewers Guild



Isle Brewers Guild Requirements

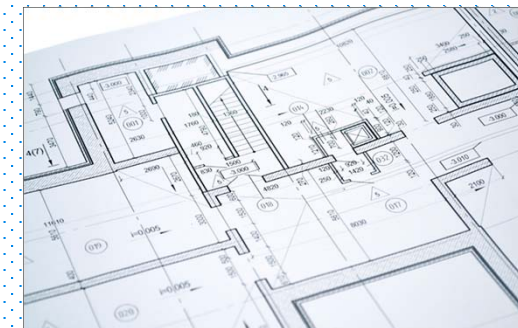
- 🍺 Came to NBC two years prior to opening
- 🍺 Permit application
- 🍺 Process plans
- 🍺 pH Recording
- 🍺 Install a discharge meter for billing purposes



WASTEWATER DISCHARGE
PERMIT APPLICATION
LONG FORM

RETURN TO:
NARRAGANSETT BAY COMMISSION
PRETREATMENT SECTION
2 ERNEST STREET
PROVIDENCE, RHODE ISLAND 02905
(401) 461-8848
(401) 461-0170 FAX

All sections of this permit application must be completed and properly signed by an official of the firm requesting to be issued a discharge permit in order for the Narragansett Bay Commission (NBC) to properly process this document. Submission of pretreatment plans, process plans, Spill and Slug Control plans, water bills, etc., with this application, if indicated within as being necessary, will expedite the permit issuance process. Please note that the discharge of process wastewater prior to the issuance of a discharge permit is a violation of the NBC Rules and Regulations and can subject the violator to an administrative penalty of up to \$25,000 per violation per day. Should you require assistance in completing this document, do not hesitate to contact the pretreatment staff at 461-8848.



Isle Brewers Guild


- 🍺 Submitted process plans and permit application
- 🍺 Guted a mill building in Pawtucket
- 🍺 Installing a discharge meter was not practical
 - 🍺 Depth of lateral
 - 🍺 Cleaning
- 🍺 Requested an alternative billing method



Alternative Billing Method

- Sent a formal request
- Proposed using the following information:
 - Department of the Treasury - Alcohol and Tobacco Tax and Trade Bureau (TTB) Form 5130.9, Brewer's Report of Operations
 - Industry standard of 6 gallons of potable water is used to produce 1 gallon of beer
 - Evaporative loss of 0.8 gallons

OMB No. 1513-0007



DEPARTMENT OF THE TREASURY
ALCOHOL AND TOBACCO TAX AND TRADE BUREAU (TTB)
BREWER'S REPORT OF OPERATIONS

Our Brewery EIN is: _____

Our TTB Brewery Number is: _____

BR: _____

TTB can reach the brewery by calling: _____

What is the name of your brewery? _____

What is the location of your brewery? _____

(Number & Street) _____ (City) _____ (County) _____ (State) _____ (ZIP Code) _____

Reporting Period (enter year) _____

Monthly Report for (enter month) _____ OR Quarterly Report for: January - March July - September
 April - June October - December

Part 1 - Beer Summary						
Operations	Cellar	Bulk	Keg	Bulk	Case	Totals
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Additions to Beer Inventory (round your entries to the nearest second decimal)						
1. On hand beginning of this report period (see line 33 totals from last monthly report or line 17 from last quarterly report)						
2. Beer produced by fermentation						
3. Addition of water and other liquids						
4. Beer received from racking and bottling						
5. Beer received in kegs (see instruction #10)						
6. Beer received from cellar						
7. Beer returned to this brewery after removal from this brewery (see instruction #11)						
8. Beer returned to the brewery after removal from another brewery of same ownership (see instruction #11)						
9. Racked						
10. Bottled						
11. Physical inventory disclosed an overage						
12.						
13. Total additions to inventory, plus beer on hand (add all columns in lines 1 through 12)						
Removals from Beer Inventory (round your entries to the nearest second decimal)						
14. Removed for consumption or sale (see instruction #7)						
15. Removed tax-determined for consumption or sale to tavern on brewery premises (see instruction #12)						
16. Removed without payment of tax for export (vessels/aircraft)						
17. Removed without payment of tax for use as supplies (vessels/aircraft)						
18. Removed without payment of tax for use in research and development						
19. Removed without payment of tax to other breweries and pilot brewing plants of same ownership						
20. Removed without payment of tax as beer unfit for sale removed for use in manufacturing						
21. Beer consumed on premises (see instruction #12)						
22. Beer transferred for racking						
23. Beer transferred for bottling						
24. Beer returned to cellar						
25. Beer racked						
26. Beer bottled						
27. Laboratory samples						
28. Beer destroyed at brewery (see instruction #13)						
29. Beer transferred to a distilled spirits plant						
30. Losses, including theft (see instruction #14)						
31. Physical inventory disclosed a shortage (see instruction #14)						
32.						
33. Total amount of beer on hand at the end of this period (see instruction #16)						
34. Total beer (see instruction #16)						

TTB F 5130.9 (04/2016) Page 1 of 2
 (See Instructions and Paperwork Reduction Act Notice on TTB F 5130.9.)

NBC Issues & Solutions

- NBC Customer Service Regulations require a meter to be used for billing
- Developed a calculation that incorporates reading the incoming water meter

Consumption = Δ water meter readings – (#bbls x 55.8 gallons)

The amount of water not discharged = 31 gal beer + 24.8 gal. evap.

Loss = 55.8 gal

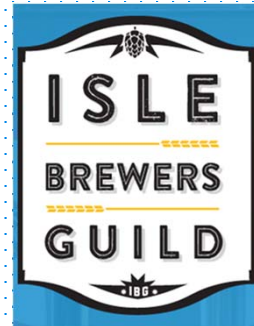
Isle Brewers Guild Consumption		
Consumption = Δ meter readings - (#barrels - 55.8 gals/barrel)		
Meter Readings		
Month	Reading (cf)	gals
Feb-17	24808	185687.9
Mar-17	45040	337124.4
Total Flow March 2017 (gals)		
	151436.52	
# barrels=		
	1081.63	
Gals not Discharged = #barrels x 55.8		
	60354.95	
Total Discharged to Sewer=		
	91081.57	

NBC Issues & Solutions

- NBC rates and billing is regulated by the Public Utilities Commission
 - Went to the PUC to amend Customer Service Terms & Conditions to allow the use of the abatement calculation
 - Isle Brewers Guild entered in to an agreement with NBC for consumption billing
- a) The amount of water used is determined based upon the input meter reading.
 - b) The amount of water not returned to sewer is determined by multiplying the number of barrels x 55.8 gallons.
 - c) The amount of water returned to sewer is calculated by subtracting the abatement usage from the input usage.
 - d) The water returned to sewer is adjusted to reflect the 15% built into sewer rates by dividing the usage calculated in line d by .85.
 - e) The consumption bill is calculated by multiplying the consumption calculated in step d by the industrial billing rate.

“The key to creative solutions is early engagement. We went to NBC almost two years ahead of our actual launch date. By sitting down with them, with enough lead time, we were able to come up with a creative solution that allowed us to offset finished goods from our assumed effluent total.”

Devin Kelly – Isle Brewers Guild





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