

FACT SHEET

Breweries, Distilleries, and other Craft Beverage Manufacturers *An Environmental Permitting and Pollution Prevention Factsheet*



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In 2026, nearly 200 craft beverage manufacturers were operating in Connecticut, with approximately 120 of them being breweries. Many have established themselves in old industrial complexes, repurposing former mills into modern manufacturing facilities and tap/tasting rooms. The craft beverage industry plays a vital role in Connecticut's economy, and the Connecticut Department of Energy & Environmental Protection (DEEP) aims to collaborate with the industry to ensure that breweries, distilleries, cideries, meaderies, and wineries operate in an environmentally responsible manner.

The brewing process uses large amounts of energy and water and generates large volumes of high-strength wastewater, along with byproduct wastes such as trub, stillage, and lees. DEEP has created a [Sustainable Craft Beverage webpage](#), that offers information on reducing pollution, minimizing waste, and implementing energy efficiency measures. Breweries and most other craft beverage producers are considered food processors and are subject to Connecticut's environmental laws and regulations.

To ensure that equipment and systems are built and operated in accordance with best practices that protect the environment and public health, environmental permits are necessary. DEEP has prepared this fact sheet to help the industry understand the various state environmental permits that may be required for operation, as well as basic suggestions for preventing pollution. Not all permits listed in this fact sheet may be necessary; state permitting requirements will depend on the specific facility and the amount of waste generated.



For projects requiring multiple environmental permits, [DEEP's Concierge and Permit Assistance service](#) is available for pre-application assistance. A pre-application meeting allows the applicant to present their proposed project to DEEP's permit program staff, review the expected permitting forms, and address any questions or concerns either the applicant or DEEP may have. To schedule a meeting, please complete the [Pre-Application Questionnaire](#) and submit it to DEEP.OPPD@ct.gov.

DEEP's Pollution Prevention program can help identify voluntary actions to eliminate waste and reduce your environmental impact. Many of these actions can also lead to cost savings. The [BetterBev program](#), active in CT, New England, and several other states, serves as a resource for the industry and recognizes facilities that implement actions to minimize waste and pollution. For more information, [contact BetterBev](#) or email DEEP.pollutionprevention@ct.gov.



It may be beneficial to work with an experienced environmental consultant familiar with Connecticut's regulations to assist in obtaining any necessary environmental permits.

Please note that local or municipal review and permitting may also be required, such as for building construction and wetlands. Local permits are not covered in this fact sheet, so contact your local planning office to ensure your project meets all local requirements. Construction and operation cannot begin until all necessary permits have been obtained.

Links to all DEEP's permit program information and applications can be found at [Permits and Licenses](#).

I. Selecting a Site: Reusing old industrial buildings can be a viable option for a craft beverage manufacturer. Some of these sites may be classified as **Brownfields**, which are underutilized or abandoned property where redevelopment or reuse has not occurred due to the presence or potential presence of pollution in the buildings, soil, or groundwater. Before the property can be reused, it must undergo investigation or remediation to address environmental concerns.



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Brownfield project: Bear's BBQ with brewery, New Haven



Before by Fuss & O'Neill



After by Skywise, LLC

When siting a brewery or other facility on a brownfield, the cleanup of pollutants must be conducted by either the buyer or the seller of the property. Compliance with the [Remediation Standard Regulations—specifically, Section 22a-133k-1 through -3 of the Regulations of Connecticut State Agencies](#) is required. It is also important to consult land records to determine whether any land use restrictions exist as part of the site’s remediation outcome.

There are various liability relief programs for municipalities and individuals seeking to remediate a brownfield site. For information on available brownfield cleanup and redevelopment assistance, including funding, please visit the CT Department of Economic Development’s [Brownfields Redevelopment](#) webpage and [DEEP’s Brownfield Program webpage](#).

II. Natural Diversity Data Base (NDDB) – An NDDB review is not required for projects that meet **each** of the following conditions: all work is limited to the footprint of an existing structure, all work will occur on existing impervious surface, and there are no discharges to nearby waterbodies. However, if project work alters an existing site footprint, includes areas of non-impervious surface (including staging, storage, and access areas), **or** discharges to nearby waterbodies, it will be necessary to consult with the NDDB program regarding impact-avoidance measures. Developers should begin this consultation by reviewing [NDDB mapped](#) areas to determine if the proposed project is in an area with documented listed species. If the project site is in a documented area, developers should submit a [Request for NDDB Environmental Review](#). The [NDDB webpage](#) provides the information needed and useful FAQs. NDDB staff will review project details and provide measures to protect listed species in the NDDB Determination Letter. The Determination Letter is required to be submitted with other state permit applications and general permit registrations. Please note that it may take up to ten weeks to review and issue a Determination Letter, and, if biological survey work is deemed necessary, the process may take longer due to the seasonal timing of the surveys.



III. Stormwater – Two types of stormwater permits may apply to a project. The first is required for construction, while the second may apply during the operation of the facility.

DEEP General Permit (GP) for the Discharge of Stormwater from Construction Activities

(Construction Stormwater General Permit) - Any project that disturbs one or more acres of land during construction must comply with the terms and conditions of this GP. Projects that disturb less than five acres and are subject to municipal review and approval can comply with the Construction Stormwater General Permit without filing a registration with DEEP by adhering to municipal land use requirements for erosion and sedimentation control, the [Connecticut Guidelines for Soil Erosion and Sediment Control](#), as amended, and the [Stormwater Quality Manual](#).

For all projects that are subject to municipal review and approval that disturb five or more acres of land during construction, and for all other projects that are exempt from local review and approval that disturb one or more acres of land, a registration must be filed with DEEP. The estimated processing time for the [Construction Stormwater General Permit](#) registration is about 90 days. These timeframes include a 30-day public comment period.

DEEP General Permit (GP) for the Discharge of Stormwater Associated with Industrial Activity

(Industrial Stormwater General Permit) - Breweries and other craft beverage manufacturers require coverage under this GP if stormwater runoff from the site discharges to surface water, wetlands, or a municipal separate storm sewer system. The Industrial Stormwater General Permit requires the operator of the facility to register with DEEP online, develop and implement a Stormwater Pollution Prevention Plan, conduct inspections, and monitor stormwater discharges. **Facilities may be exempted** from these requirements, however, by certifying that no materials or equipment are exposed to stormwater and by filing a No-Exposure Certification (submitted [online using EZfile](#)). The estimated processing time for a registration or No-Exposure Certification under the Industrial Stormwater General Permit is 90 – 180 days.

At any time, the Commissioner can determine that a discharge associated with a construction activity or a stormwater discharge associated with an industrial activity requires an individual permit under the National Pollutant Discharge Elimination System (NPDES) program and Connecticut's Water Pollution Control Act, typically for very large or more complex project sites, or sites with environmentally significant receptors or natural resources adjacent to the site or nearby. Likewise, an applicant can apply for an individual permit rather than utilize General Permit. Individual permit processing time can be longer, due to the individualized determinations that must be made.

IV. Wastewater Discharge – Large volumes of wastewaters are generated during the brewing process that have high biochemical oxygen demand (BOD), chemical oxygen demand (COD), and total suspended solids (TSS), wide pH swings, high temperatures, and slug loading from batch discharges. If discharged to surface water or groundwater, these wastewaters can have significantly negative impacts to the waters of the State. If discharged to a sanitary sewer without proper pollution prevention,



these wastewaters can damage the biological balance at the wastewater treatment plant. In both cases, significant public health nuisances and adverse environmental impacts can result. Under state law, **all** discharges are required to be regulated under a permit. Breweries and other craft beverage manufacturers that discharge wastewater to a sanitary sewer system or that transport any amount of wastewater to a sewage treatment plant need to register for a permit. DEEP has determined that this industry's wastewater, if discharged to the sanitary sewer, may be eligible for one of the General Permits. These permits establish limits on the pollutants that can be discharged.

- [Non-Significant Industrial User \(Non-SIU\) General Permits](#) (GP) – A Non-SIU General permit will be required for any brewery, winery, distillery, cider, and mead producers that generate less than 25,000 gallons per day (gpd) and for any of these producers whose discharge will be transported to the receiving POTW. Most craft beverage manufacturers in CT discharge under 25,000 gpd and would likely fall within the Non-SIU General Permit. The Non-SIU General Permit requires submittal of a Notification to DEEP and the applicable POTW Authority.
- [Significant Industrial User \(SIU\) General Permit](#) (GP) - An SIU General Permit will be required for any craft beverage manufacturer that discharges equal to or greater than 25,000 gpd to the sanitary sewer, on any day; has a wastewater that makes up 5% or more of the average dry weather flow or organic loading of the receiving WPCF; or has been determined by the Commissioner to be an SIU. SIU General Permit requires registration with DEEP. The typical processing timeframe for the SIU General Permit is 6 months.

The Non-SIU and SIU GPs require the following wastewater management:

- Isolation for proper disposal of grains, hops, and other solids;
- Isolation of other high-strength liquids like trub, yeast, lees, stillage, waste fermentables or off-spec product; and
- Limiting the types of cleaners and disinfecting agents that can be used.

Best management practices for wastewater discharge will remove high-strength solids. Brewers should not allow beer to go down the drain, consider reusing final rinse water for pre-rinsing, and side-stream process wastes (by installing correct gauge screens, filters or baskets on all drains, and allow solids to settle). Often, side-streamed waste, such as spent grains, yeast, and hops can be managed more efficiently (used for animal feed, composted, sent to a digester). [DEEP's website](#) has case studies of CT breweries that reduced wastewater pollution and other resources; the New Hampshire Department of Environmental Services Pollution Prevention program has developed a [Wastewater Best Practices for Breweries](#) guidance document; some of the recommendations may be adaptable to Connecticut breweries.

Discharging wastewater from breweries, distilleries, wineries, etc. to a septic system is typically not acceptable or feasible. The most common option is to collect and transport wastewater to a wastewater treatment plant (see DEEP's list of [Connecticut Publicly Owned Treatment Works \(POTWs\) Approved to Accept Transported, Non-domestic Wastewaters](#)) or to transport to a permitted anaerobic digester (AD) or composting facility.



by Kat Marvychuk on Unsplash

It is recommended that you contact the municipal wastewater treatment plant that will receive your discharge. Maintaining open communications with will be helpful for the beverage producer to understand the constraints on the system and for the wastewater treatment facility to understand the characteristics of the discharge. Additionally, this communication can provide advance notice if a heavy concentration needs to be released. For further assistance

regarding permitting requirements for process wastewater discharges management, contact the Water Permitting and Enforcement Division to discuss your project at DEEP.WaterPermittingEnforcement@ct.gov or (860) 424-3025 or go to our [webpage for information on water discharge permits and general permits for process wastewaters](#).

V. Solid Waste – Craft beverage manufacturers generate several types of solid waste. Some examples include cardboard, paper, plastics, aluminum, glass, food waste from tasting rooms and food trucks, and, if side-streamed, waste from the brewing process.

Mandatory Recyclables – All businesses must comply with [Connecticut's recycling laws](#) that identify specific wastes and materials that are designated as mandatory recyclables, and everyone needs to keep the designated recyclable items out of the trash and ensure their proper recycling. Current designated recyclable items include: 1) glass and metal food containers; 2) high grade white office paper; 3) newspaper; 4) scrap metal; 5) corrugated cardboard; 6) waste oil; 7) motor vehicle storage batteries (e.g., lead acid storage batteries); 8) Ni-Cd rechargeable batteries; 9) leaves; 10) grass clippings; 11) HDPE and PETE plastic containers; 12) boxboard; 13) magazines; and 14) colored ledger paper. Please note that not all mandatory recyclables are allowed in your mixed recycling bin; scrap metal, waste oil, batteries, leaves, and grass must be recycled but managed separately.

Waste Streams from the Brewing / Distilling Process – Beer, spirits, wine, cider and mead making each produce several similar waste streams – spent grains, yeast, trub, stillage, pomace, lees, fruit skins, and diatomaceous earth; these can be side-streamed, collected, and managed. These are referred to as organic wastes because they are biodegradable and can be reused as animal feed, added to compost, or sent to a permitted, commercial or farm-based anaerobic digester rather than

being discharged with wastewater. Anaerobic digesters break down organic material and produce biogas that are often used to generate electricity.

Connecticut has a [Commercial Organics Recycling law \(CGS Section 22a-226e\)](#) that requires food manufacturers and processors (breweries and related facilities are included) that generate an average projected volume of not less than twenty-six tons per year and are located not more than twenty miles from an authorized source-separated organic material composting facility to separate the organic material from other wastes and recycle it at an authorized facility. DEEP has information on organics recycling options, including authorized and permitted facilities:

- [Permitted Volume Reduction Anaerobic Digestion and Food Waste Composting Facilities](#)
- [Food to Animal Feed Options](#)
- [Organics Management](#)



Breweries and other craft beverage manufacturers should consider finding opportunities to reuse waste organics. Spent grains may be reused as animal feed, bakery ingredients, compost, or for biogas generation. Trub and spent yeast are best reused or used in compost or biogas generation. Diatomaceous earth used in the filtration process may be replaced with cross-flow filtration technology, composted, or reused in construction materials.

(Source: <https://epa.ohio.gov/Portals/29/documents/breweries.pdf>) [Merrimack Ale provided by Utiliency.com]

On-farm breweries may be able to use wastewaters produced for irrigation and agronomic requirements of crops during the growing season if adequate cropland is available. Development of a Comprehensive Nutrient Management Plan by a certified conservation planner is required to be submitted to DEEP for review and approval. Contact the Water Planning and Enforcement Division at (860) 424-3018.

The [National Brewers Association](#) offers (to their members only) detailed guidance on best management practices for chemical and physical treatment, solid waste reduction, removal, and reuse in their *Water and Wastewater: Treatment/Volume Reduction Manual*, *Wastewater Management Guidance Manual*, and *Solid Waste Sustainability Manual*.



VI. Air – Craft beverage manufacturers typically do not require any air permits for the brewing process itself. Large production facilities may require air permits; however, none are currently operating in Connecticut. Air permitting is triggered based on the potential emissions of air pollutants from the individual pieces of equipment and the aggregate potential emissions from the facility. Fermentation results in emissions of ethanol, which is an air pollutant. To estimate potential emissions from brewing, distilling, and wine making, refer to AP-42:Compilation of Air Emissions Factors, [Chapter 9.12.1 to 9.12.3](#).

Additionally, some of the ancillary equipment commonly located at new, existing, and repurposed buildings in which breweries are commonly located may trigger air permitting. These ancillary sources could include oil or gas fired boilers for building heat and hot water and diesel, propane or natural gas fired back-up generators. To estimate potential emissions from boilers and back-up generators (also known as “emergency engines”), calculators are available for both types of sources on the [Air Permitting Assistance webpage](#). If results from these calculators show that potential emissions of any individual air pollutant are above 15 tons per year, the source may require a permit. Similarly, there may be other types of heating, cooling equipment or other ancillary sources that may have emissions that trigger air permitting. An environmental consultant with experience in air permitting in Connecticut may assist in making the determination or permit applicability and submitting the necessary forms. Contact DEEP’s Air Permitting group at DEEP.BAM.AirPermits@ct.gov or (860) 424-4152 to discuss the specifics of your project and permit applicability.

VII. Energy – Eversource and UI customers can take advantage of several utility-run incentive programs. Energize Connecticut has a [Small Business Energy Advantage](#) program that can provide free on-site audits by an approved vendor to identify opportunities for savings. Businesses can also replace inefficient and outdated equipment through the [Energy Opportunities](#) program. Other Commercial and Industrial efficiency programs may also be available, including the [Energy Conscious Blueprint](#) program for new or existing breweries that are undergoing major renovations.



Some common areas to upgrade and maintain include motors, lighting, compressed air, and refrigeration; reusing waste heat, installing solar panels for electricity or a solar hot water system are additional ways to increase energy efficiency at breweries. DEEP’s [Sustainable Breweries webpage](#) has additional information, including case studies.

The [Non-Residential Energy Solutions Program](#) (NRES) is a statewide program



that provides renewable energy tariffs to compensate non-residential owners of distributed energy resources like solar for the power their systems produce and provide to the electric grid. The program provides businesses an opportunity to lower their utility bills and use “greener” energy. Businesses can participate through monthly bill credits over a 20-year term for their renewable energy production and choose from two different payment structures, Buy-All and Netting. [Eversource](#) and [UI](#) have websites with program details.

This fact sheet is intended for informational purposes only based on the information available as of the date of its publication and does not represent a formal jurisdictional determination by which DEEP or any other permitting authority referenced will be bound. Information contained in this fact sheet does not represent a comprehensive list of all permit requirements potentially applicable, which in most cases can only be determined on a site-specific basis. It is intended only to provide information on permits that may be required. Refer to the most current statutes, regulations, and public acts for specific language pertaining to each permit. It is your responsibility to comply with all applicable laws. Contact DEEP (DEEP.CONCIERGE@ct.gov) with questions regarding a specific site or project.

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