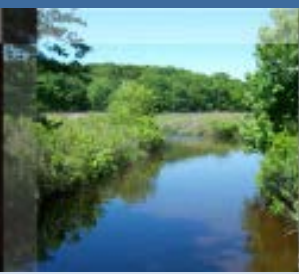




Connecticut Department of Energy and Environmental Protection



Pollution Prevention for CT Breweries

3/16/21 – CT Brewers Guild Meeting

Presented by:

Connie Mendolia – CT DEEP Pollution Prevention

Don Gonyea - CT DEEP Water Permitting



Connecticut Department of Energy and Environmental Protection

Brewery Pollution Prevention

- Breweries are a growth industry in Connecticut and across the country
- There can be problems if waste and wastewater is not managed properly
 - Normal sewage has an oxygen demand (BOD and COD) of around 600 ppm
 - Brewery wastewaters can average about twice this.
 - Spent grains can have BOD/COD over 100,000 ppm
 - Trub can have BOD/COD of over 250,000
 - 1 gallon trub costs the same as 400 gallons of sewage to treat
 - Spent grains can cause clogs in the sewer and scum formation at the WPCF
- Regulatory authorities (POTWs, federal and state) across the country are increasingly experiencing problems with these materials being inappropriately managed and discharged to POTWs and waterways.
- Goal of Pollution Prevention (P2) is to assure DEEP rarely needs to be involved

Brewery Pollution Prevention

DEEP's P2 Team focusing on Sustainable Breweries

We can help with several sustainability issues including:

1. Wastewater
2. Waste streams – organics, solid waste & recycling
3. Energy efficiency
4. Alternatives to toxic cleaners

DEEP Brewery Assistance

DEEP's P2 Team would like to do **presentations** for breweries, cideries, wineries, distilleries

Future meetings on wastewater, waste organics from brewing process, food waste and recycling, energy efficiency, using less toxic cleaners, etc.

For example:

- Discuss the sources of problematic wastes
- Help brainstorm / identify new solutions
- Discuss options for management of the wastes & legalities
 - Solid Waste – Disposal, Reuse or Reprocess, Repurpose
 - Wastewater – Discharge or Reuse
 - Discharge needs a permit – info on new MIU & SIU GPs
 - Reuse needs an approved management plan

DEEP Brewery Assistance, cont.

DEEP's P2 Team can also provide **Onsite assistance** with:

- Setting up recycling & organics diversion programs
- Pilot projects to reduce pollutants in wastewater discharge, share results
 - DEEP may be able to fund some of the preliminary work using consultants
 - Identify the potential sources of pollution
 - Identify BMPs, waste reduction, re-use options, other alternatives
 - Develop guidance to reduce disposal costs
 - Coordinate efforts to reduce costs, including transportation costs
- Energy efficiency audits & actions coordinated w utility companies, benchmarking

DEEP Brewery Assistance, cont.

Check out DEEP's New Sustainable Breweries Webpage -

<https://portal.ct.gov/DEEP/P2/Industry/Sustainable-Breweries>

Contact Us:

- Connie.Mendolia@ct.gov - P2
- Donald.Gonyea@ct.gov - Wastewater
- Caren.harder@ct.gov - Organics, recycling