

# Managing Wastewater Discharges: Residential, Commercial, and Industrial Applications

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# Discussion Points

## MANAGING WASTEWATER DISCHARGES

- Allowable Discharges to a Septic System
- What Qualifies as a Commercial or Industrial Discharge
- Why These Cannot Discharge to a Septic System
- WP70/70a applications: What Has Worked & What Has Not...
- Garage Floor Drains: A Special Case
- Questions on Commercial and Industrial Discharges

## MassDEP TITLE 5 UPDATES & REMINDERS

- Accessory Dwelling Units (ADUs)
- I/A Site-Specific Pilot Technology Approval Process
- Alternative SAS – Treatment With Disposal
- Form 11 & Form 12 Completeness
- Questions
- MassDEP Contacts

# Allowable Discharges to a Septic System

# 310 CMR 15.004(4)

- The provisions of 310 CMR 15.000 apply only to the on site collection, treatment and disposal of sanitary sewage, and to the transport and disposal of associated septage and grease, and do not apply to the wastewater containing wastes from any other activity including, but not limited to, activities under the Standard Industrial Classification (SIC) Codes set forth at 310 CMR 15.004(5).

310 CMR 15.002 defines sanitary sewage and/or sewage as:

Either greywater or blackwater or a combination of greywater and blackwater from domestic, commercial and other non-industrial sources. Sanitary sewage does not include stabilized waste.

# SEPTIC ACCEPTABLE DISCHARGES

- Toilet
- Urinal
- Bathroom sink
- Kitchen sink (other than food production sink)
- Shower
- Bathtub
- Washing machine (not commercial washing machines: coin-op are fine)
- Home dialysis machine



# What Qualifies As A Commercial or Industrial Discharge?

- Essentially anything else
- There is a fine line between commercial and industrial
- If it would not come from the average household, it falls into either of these two categories

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# 310 CMR 15.004(5)

- Contains a long list of industries by SIC Code
- Common commercial businesses and industries located in unsewered areas:
  - Auto repair\*
  - Garage facilities of any type with floor drains\*
  - Hair salons/barber shops
  - Commercial laundries (not coin-operated)
  - Food producers
  - Wineries
  - Breweries/Cideries
  - Printers
  - Metal industries

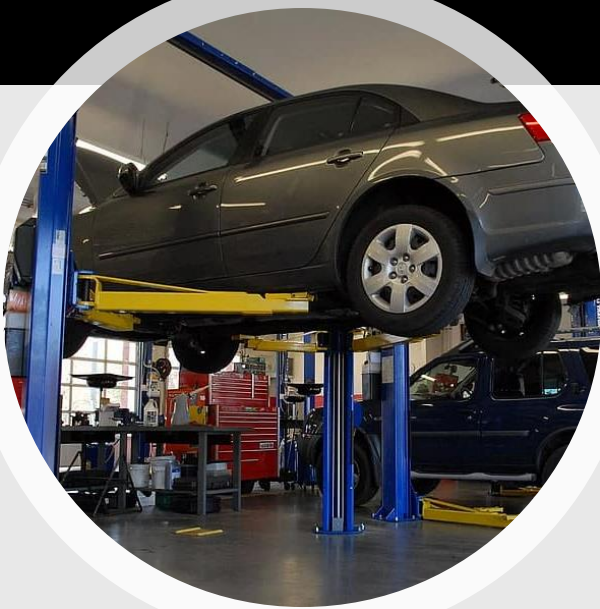
\* To be discussed in depth later



# UNACCEPTABLE SEPTIC SYSTEM DISCHARGES

- Process sink
- Contact or non-contact cooling water
- Laboratory sink (even from a school)
- Commercial laundry operation
- Winery/Brewery/Cidery/Dairy discharge
- Floor drain
- Discharge from manufacturing, process or cleaning operations
- Dialysis clinic discharge





Why These Cannot Discharge  
to a Septic System

# Issues with these Discharges

- Check the MSDS of Products
  - Hazardous chemicals
  - Oxidizing agents
  - Misleading “all-natural” or “organic” products
  - Frequency of application
- MSDS will indicate if the product is septic safe
  - If it can't go to septic, holding tank required

# WP70/70a Applications : What Has Worked and What Has Not...



# WP70/70a Application

WP70: Alternative Design Flow

WP70a: Non-Sanitary Discharges



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection – Title 5 Permitting

## BRP WP 70 Alternative Design Flow for Title 5 Systems BRP WP 70a Non-Sanitary Wastewater Discharges to Title 5 Systems

### Permit Fact Sheet

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#### 1. What is the purpose of this approval?

This approval is necessary to allow for a determination of an alternative Title 5 design flow (BRP WP 70) or for the discharge of small quantities of non-sanitary wastewater to Title 5 systems (BRP WP 70a). The purpose of Title 5 is to provide for the protection of public health, safety, welfare and the environment by requiring the proper siting construction, upgrade, and maintenance of on-site sewage disposal systems and appropriate means for the transport and disposal of septage.

You must obtain approval from MassDEP for the use of an alternative Title 5 design flow pursuant to 310 CMR 15.203(8) and for the discharge of non-sanitary wastewater discharges to Title 5 systems pursuant to 310 CMR 15.004(4).

Please be advised that the purpose of the BRPWP70 Alternative Design Flow in accordance with 310 CMR 15.203(8) is solely for the design of a septic system not for the expansion of a facility, the determination of available capacity in an existing system, or the issuance of an occupancy permit for vacant space in a commercial building. These determinations are made by the Local Approving Authority.

#### 2. Who must apply?

- A) Any individual, business or organization proposing the use of an alternative Title 5 design flow pursuant to 310 CMR 15.203(8)
- B) Any individual, business or organization proposing to discharge non sanitary wastewater to a Title 5 system.

#### 3. What other requirements should be considered when applying for this approval?

Check with the local approving authority for any local bylaws, which may address this proposed use.

Note: These additional requirements are intended to serve as a guide to the applicant. They do not necessarily include all additional requirements.

#### 4. What is the application fee?

The application fee for application BRP WP 70 and BRP WP70a is \$700.

#### 5. Where should the application be sent?

The application must be submitted through ePLACE, located here: <https://eplace.eea.mass.gov/citizenaccess>

Additional visual ePLACE step-by-step instructions to assist in submitting your application are available at: <https://www.mass.gov/how-to/wp-70-70a-alternative-design-flow-for-title-5-systems-non-sanitary-wastewater-discharges>

# WP70: Alternative Design Flows

- Not for existing T5 systems
  - MassDEP does not review
  - BOH is the approving authority
  - The applicant needs to work with BOH (Is BOH even open to considering it?)
- However, if a new or replacement (upgrade) system is proposed:
  - Approval and issuance for WP70 on a case-by-case basis by MassDEP alone.
  - Any approval issued by the MassDEP applies solely to that facility and not to similar facilities or for the same facility at other locations (i.e a chain location)
- MassDEP has approved for tie-dye business, vet clinics, etc.

# WP70 Applicability and Requirements

- Applicability
  - Upgrade of an existing system
  - New or expansion of an existing system
  - Deviation from 310 CMR 15.203 flows
- Requirements
  - Water meter data from similar facilities (6 months min)
  - PE Stamped Engineering Plans
  - Letter of intent describing deviation from 15.203
  - Local Approving Authority confirmation

# WP70a: Non-Sanitary Wastewater Discharges to Septic Systems

- Non-sanitary septic system users
- <https://www.mass.gov/guides/nonresidential-septic-system-users>
- Originally added to primarily address, but is not limited to:
  - Wineries
  - Breweries
  - Cideries
- Material Safety Data Sheet (MSDS) is key to determine:
  - Septic safe or
  - Industrial wastewater holding tank (IWHT)



# WP70a: Examples

- **Hair Salon:** MassDEP MSDS research wide range of products including “all natural” and “organic”
  - Sanitary from toilets and non-chemical wash sinks can go to septic
  - Sinks or sources from hair dyes and associated products go to IWHT
- **Lab Sinks, Water Testing Labs** (similar to hair salons):
  - Sanitary from toilets and non-chemical wash sinks can go to septic
  - Lab sinks, etc. go to IWHT
- **Vet(erinary) Clinic:**
  - Sanitary from toilets and non-surgical wash sinks can go to septic
  - Surgical and chem wash sinks require MSDS review
    - Septic Safe or Holding Tank
- **Home Tie-Dye Business:**
  - MSDS will determine if septic safe or holding tank

# Garage Floor Drains: A Special Case





WP56  
Application:  
IWHT

After-the-fact certification

Oil-water separator required

Otherwise, different set of regulations and far more costly


# Regulatory Requirements

 Changes to Plumbing Code 248 CMR 10.09(1)	Oil/water separator required for floor drains in unsewered areas
 IWHT 314 CMR 18.00	Non-Hazardous Industrial Waste
 310 CMR 30.00 Hazardous Waste Regulations	Storage of oil and grease in holding tanks
 314 CMR 18.00 vs 310 CMR 30.00	If separator; WP56 application process If no separator; no longer falls under 314 CMR 18.00

# Commercial and Industrial Discharges to Septic Systems

Any Questions?

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MassDEP Title 5  
Updates  
and  
Reminders

# Accessory Dwelling Units (ADUs)

- August 6, 2024 Affordable Homes Act (AHA) signed
- AHA includes ADU As-of-Right
- AHA takes effect February 2, 2025
- AHA indicates that “the use of land or structures for such accessory dwelling unit under this paragraph may be subject to reasonable regulations, including, but not limited to, 310 CMR 15.000 et seq., if applicable”
- MassDEP hopes to issue a guidance on the relationship between Title 5 and the AHA in the near future.
- Cities and towns need to consult municipal counsel regarding local bylaw and regulation issues.

# I/A Site Specific Pilot Approvals

- DEP is approving authority for Site Specific Pilot approvals
  - Applies to DEP Approved Pilot Technologies
- Procedure
  - Applicant/Engineer Drafts Plans with proposed pilot technology
  - Applicant submits plans to BOH for review and Approval
    - BOH issues letter/document/approval allowing installation of the system
  - Applicant/Engineer submits the BOH approved Plans and BOH Documentation to DEP
    - Application to DEP is the WP64b
  - WP64b Application is Reviewed by DEP
    - DEP Issues Approval with system and technology approval requirements (monitoring, etc)
  - After DEP issues approval, Applicant/Engineer submits that approval to BOH
    - BOH issues DSCP to begin installation



# Current I/A Technologies Approved for Piloting

<b>Technology</b>	<b>Flow Limitation</b>	<b>Approval Sought</b>
BioBarrier MBR	< 10,000 gpd	Nitrogen Reduction
BioRock Monoblock	< 2,000 gpd	Nitrogen Reduction
HydroKinetic	< 600 gpd * expired 11/07/2023	Nitrogen Reduction
Jet-1500CF	< 1,500 gpd	Nitrogen Reduction
NORWECO Drip System	< 10,000 gpd	Alt. SAS
Phos-4-Fade	< 10,000 gpd	Phosphorus Reduction
PhosRID	< 10,000 gpd	Phosphorus Reduction

# Alternative SAS – Treatment with Disposal

- Standard Conditions limit number of reductions
- Some misinformation may have been previously conveyed
- These limitations apply to the following technologies:
  - Eljen GSF
  - Enviro-Septic by Presby
  - Advanced Enviro-Septic by Presby
  - Simple-Septic by Presby
  - Infiltrator ATL
  - GeoMat



# Standard Conditions for Alternative Soil Absorption Systems General Use and Remedial Use Approvals

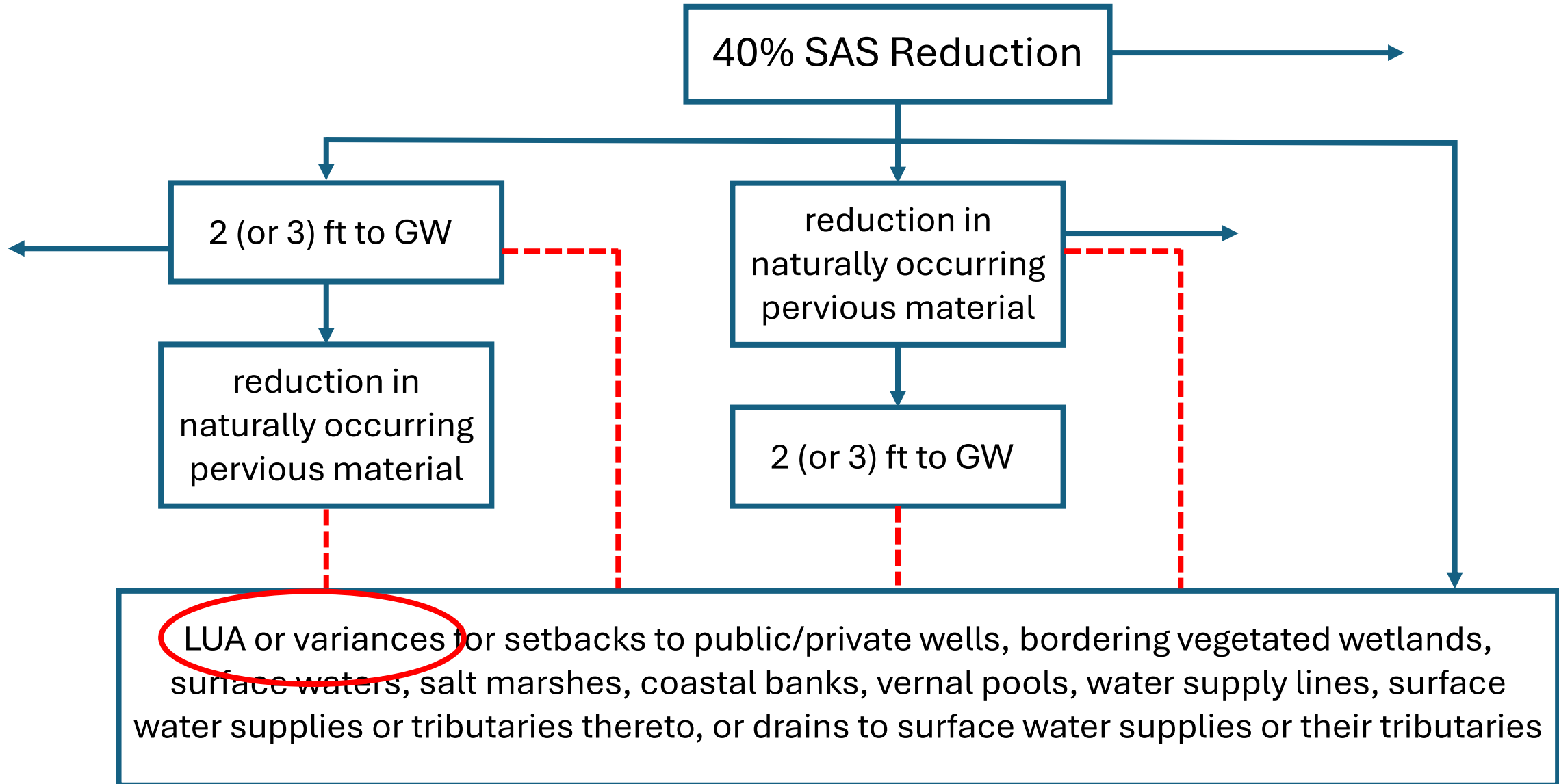
Last revised March 5, 2018

## II. Design and Installation Requirements...

### 10. Specific Conditions for Treatment with Disposal Alt. SAS Technologies


- (d) For upgrades only, a reduction in the depth to groundwater and/or a reduction in the pervious material may be taken in accordance with Section II, paragraph 5 of the Standard Conditions for Secondary Treatment Units Approved for Remedial Use. In no case, shall the reductions allowed under the Standard Conditions for Secondary Treatment Units be combined with any reduction provided by this Approval, the alternative technology's Remedial Use Approval Special Conditions or with any reduction that may be allowed under the procedures of Local Upgrade Approval or variance procedures of 310 CMR 15.401-415.
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Let's say an Infiltrator ATL is proposed...



# Form 11 & Form 12 Completeness

- Soil evaluator is responsible.
- Forms must be completely filled out.
- Even if some information may seem duplicative.
- These forms have changed since some SEs were initially trained and approved.
- SEs need to stay up to date.
- There are soil review classes with TCHs.



# BOH Response to Incomplete Forms

- Communication at time of soil testing
  - Complete and up-to-date forms
  - Timely submittal of forms
  - Consequences for failure of either
- Potential consequences
  - Determination of incomplete submittal
  - Requirement of resubmittal
  - Additional actions as may be required by local bylaws or regulations



Questions?

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# Regional Contacts

**CERO**

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**NERO**

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# MassDEP Title 5 Program Contacts

## I/A PROGRAM

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## STATEWIDE HELPLINE

Title 5 Email Helpline  
[dep.title5@mass.gov](mailto:dep.title5@mass.gov)



**THANK YOU**



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