

Frequently Misunderstood Title 5 Issues

PRESENTER

2016 MassDEP/MHOA Seminar

LOCATION

DATE

Topics to be Discussed

- Inspections
- Design Flows
- Use of the B horizon
- Higher LTARs for Pressure Distribution
- Local Upgrade Approvals
- Alternative Percolation Policy
- Tight Tanks & Holding Tanks
- Certificates of Compliance
- SAS Material Disposal

The background is a dark blue gradient with several large, semi-transparent gear shapes scattered across it. On the left side, there is a vertical strip with a textured, metallic appearance, featuring various shades of orange, yellow, and brown, with some gear-like shapes visible within it.

INSPECTIONS

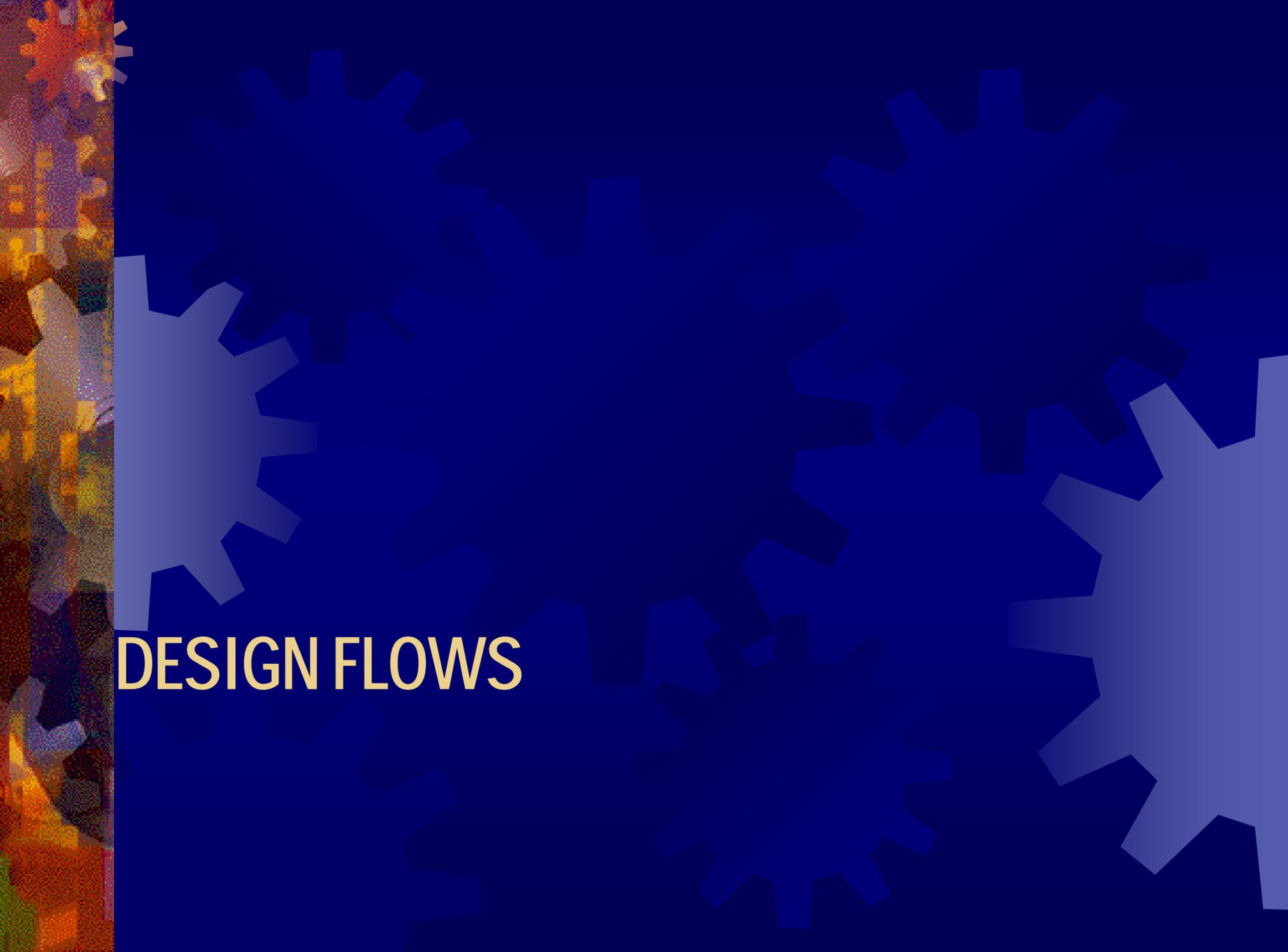
Unoccupied Dwelling

- BOH can require a full inspection, noting that the property is currently not occupied; OR
- Owner signs an enforceable and binding upon subsequent owners agreement to upgrade the system within two years of property transfer.

If system is inspected, BOH may require an inspection once property is occupied [310 CMR 15.301(9)].

Water Quality Sampling Responsibility if Required

- Sampling requirement within T5 inspection
- Parameters: fecal coliform bacteria, ammonia nitrogen and nitrate nitrogen
- Responsibility of T5 inspector
- Performed in accordance with sampling protocols and chain of custody
- Consultation with laboratory is recommended



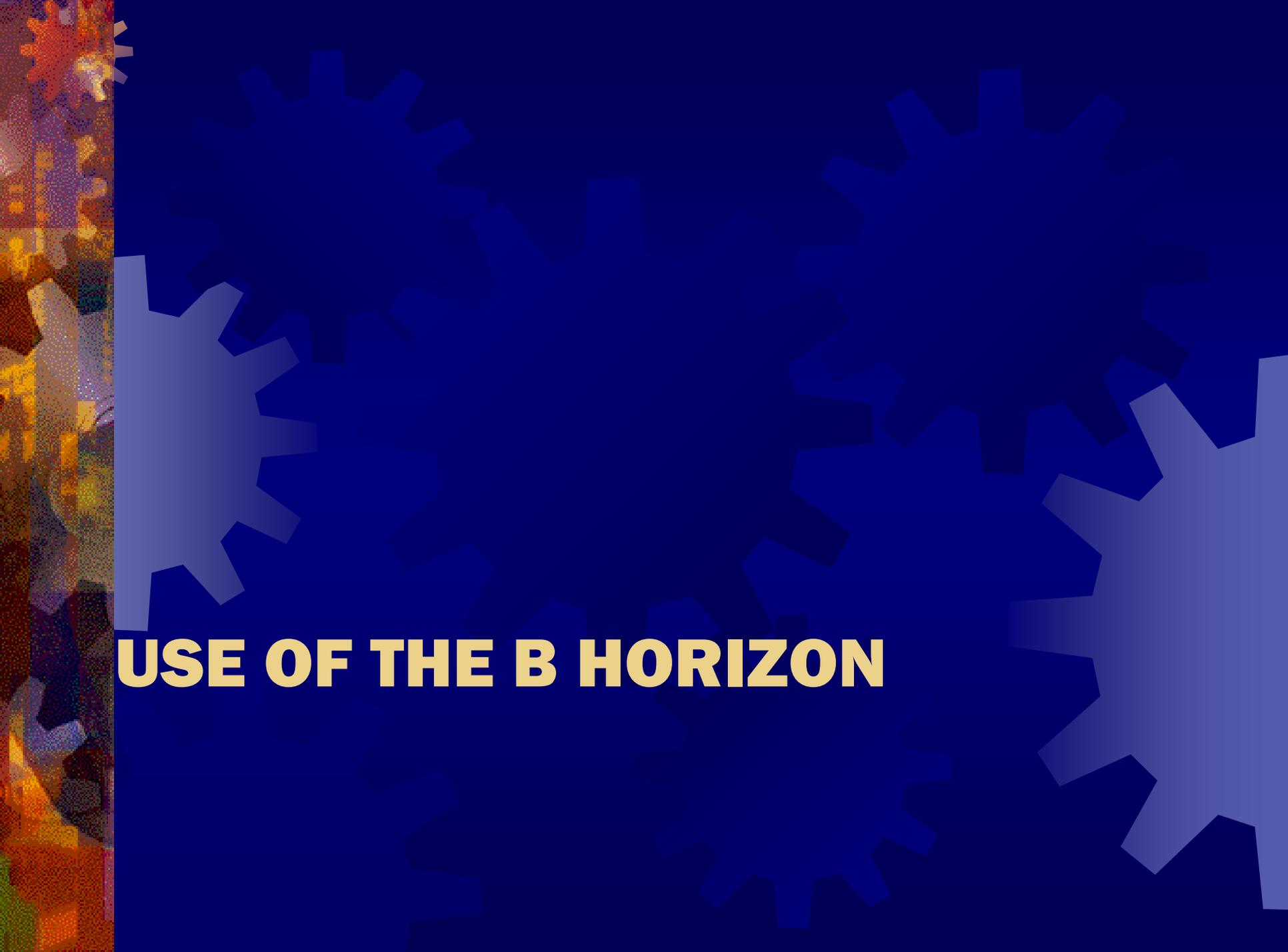
DESIGN FLOWS

Design Flow Standards

- 310 CMR 15.203 must be used
- Use of any flows other than those needs MassDEP approval as a schools flow variance (BRPWP60) or an alternative design flow (BRPWP70)

Executive Order 562

- “To Reduce Unnecessary Regulatory Burden”
- Issued March 2015; Applies to all MA agencies
- Significant stakeholder comments, including:
 - Re-evaluate design flows, and
 - Consider changes to GW discharge flow threshold
- MassDEP evaluating now and into months ahead - will engage external stakeholders
- In Spring 2016, MassDEP will also propose design flow for Assisted Living Facilities (req by Law)



USE OF THE B HORIZON

B Horizon

- No longer considered impervious [310 CMR 15.002 *Impervious material*]
- May be used as part of the naturally occurring pervious material
- But it must be perc tested if it is the most restrictive layer.



**HIGHER LTARS FOR PRESSURE
DISTRIBUTION**

310 CMR 15.252(1)(b)

- Establishes higher LTARs when pressure distribution is used;
- Prohibits the use of the higher LTARs in conjunction with I/As approved for reduced SASs; and
- Prohibits the use of the higher LTARs in SASs already reduced in conjunction with LUA.

Permitted

- Septic tank, pump chamber and 100% pipe and stone SAS with pressure distribution.
- Septic tank with GUA FAST for nitrogen removal, pump chamber and 100% pipe and stone SAS with pressure distribution.
- Septic tank with RUA Jet for 2 feet to GW in 20 mpi soils, pump chamber and 100% pipe and stone SAS with pressure distribution.

Not Permitted

- Remedial site - septic tank, pump chamber and 75% pipe and stone SAS with pressure distribution.
- Septic tank with RUA Jet for 50% SAS reduction and 2 feet to GW in 20 mpi soils, pump chamber and pipe and stone SAS with pressure distribution

The background features a dark blue field with several large, semi-transparent gear shapes in various shades of blue. On the left side, there is a vertical strip with a textured, colorful pattern that resembles a cityscape or industrial scene with warm tones of orange, yellow, and brown.

LOCAL UPGRADE APPROVALS

LUA vs. Variance

Goal is always full compliance even for upgrades.

LUA

- Upgrades only, no increase in flow
- The Code sets a required order for LUA consideration
- There is limited required notification to abutters.

Variance

- Applicant must demonstrate denial of the variance would be manifestly injustice*
- Applicant must demonstrated that equal environmental protection has been provided.

* For new construction, applicant has to prove that denial would deprive applicant of all beneficial use of the property.

A Few More Things on LUA

- Make sure LUA requests are sought in required order presented in the Code (310 CMR 15.405(1)).
- Make sure all conditions of LUA approval are met:
 - 310 CMR 15.405(1)(h) – reduction in groundwater separation
 - Perc Test LUA – follow the policy.



ALTERNATIVE PERC POLICY

When to Use it

- Used as part of LUA [310 CMR 15.405(1)(i)]
- Upgrades only: not for new construction
- Perc test cannot be performed as determined by Approving Authority

How to Use It

- Determination compacted or non-compacted (written concurrence of Approving Authority);
- Particle size analysis by a qualified soils lab;
- Determination of soil type; and
- Determination of soil class.

CLASS	COMPACTED?	DESIGN CRITERIA
1	N	> 85% sand 0.74 gpd/sf 70 - 85% sand 0.66 gpd/sf
1	Y	0.15 gpd/sf Pressure distribution required
2	N	0.33 gpd/sf
2	Y	0.15 gpd/sf Pressure distribution required
3 or 4	N or Y	0.15 gpd/sf Pressure distribution required



TIGHT TANKS & HOLDING TANKS

Tight Tank

- Watertight tank with no outlet to retain sewage for hauling
- Collects all sewage from a facility
- Permittable for existing facilities (some exceptions)
- Permitted by the Approving Authority

Holding Tank

- Watertight tank with no outlet to retain non-sanitary sewage for hauling
- Collects only a portion of sewage from a facility
- After-the-fact certification (DEP 01)



Tight Tank

- Failed system
- No other feasible alternative

Tight Tank Exceptions

- Existing seasonal residence with failed system provided there is a six-month occupancy deed restriction;
- Boat pump out facility;
- Facility associated with a public water supply where it is not feasible to connect to municipal sewer or construct a complying system; or
- Publicly owned and operated seasonal structures where it is not feasible to connect to municipal sewer or construct a complying system.

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CERTIFICATES OF COMPLIANCE

Problems with CoCs

- Designer or installer dies or relocates out of state;
- Designer and/or installer refuses to sign CoC:
 - Case-by-case basis
 - Consumer/vendor dispute
 - 310 CMR 15.019
 - 310 CMR 15.021(3)
 - Local bylaw or other licensing



SAS MATERIAL DISPOSAL

Options

- Mix material with lime and bury with at least 6 inches of cover; or
- Haul material for landfill disposal or cover material; or
- Other options that may work in your community.





MassDEP #ERO Contact

NAME

TELEPHONE NO.

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Thank you!