

Hazardous Material Bylaw

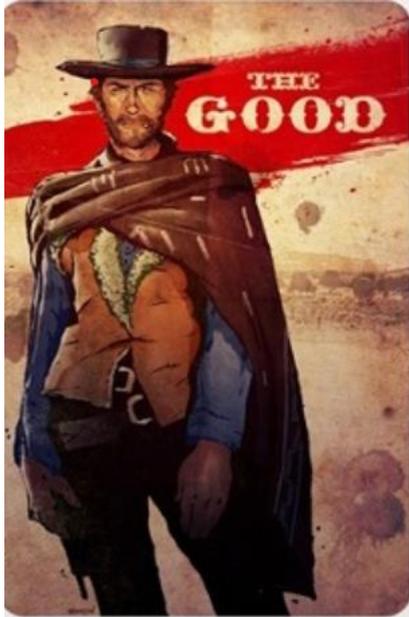
ARTICLE 38

Summary

The purpose of this bylaw amendment is to:

- Update areas of the zoning bylaw that address the use of hazardous materials and hazardous waste.
- Help clarify confusing terminology.
- Add Uses that may handle hazardous materials and hazardous waste that were not previously contemplated.
- Be more protective of the human and natural environment.

Why Do We Need This?



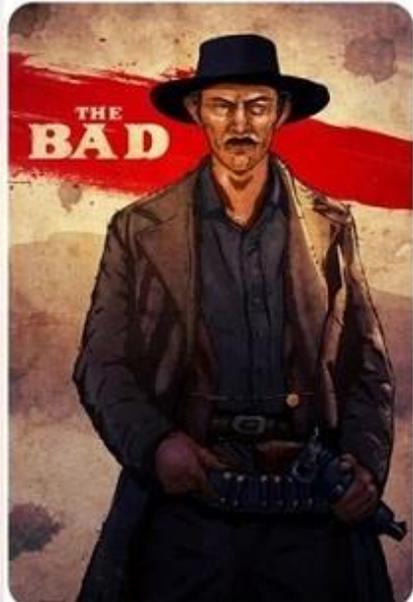
The Good - Biotech is coming. It brings good jobs and revenue.

In 2020, venture capital investment in Massachusetts-based companies reached \$5.8 billion, surpassing 2018's previous record high of \$4.8 billion.

“Because of the state’s rich history in biotechnology, many of its cities and towns have increasingly adopted local policies that greatly ease the pathway for renovation or new construction of biotech laboratory and manufacturing facilities.”

Mass Biotech Council website

Why Do We Need This?



The Bad – Potential for irreparable impacts to natural and human environment if not managed appropriately.

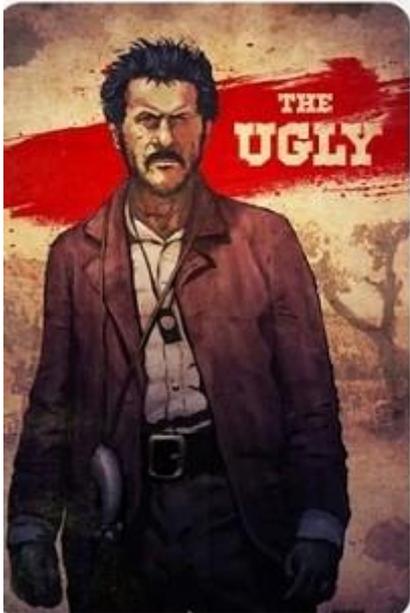
W.R. Grace Superfund site, Acton, MA – Effluent wastes disposed of in several unlined lagoons; solid and hazardous wastes were placed into an on-site industrial landfill and several other disposal areas.

Sampling of two public supply wells by the Town of Acton in 1978 indicated these two municipal wells contained detectable concentrations of 1,1-dichloroethene or vinylidene chloride (1,1 DCE or VDC).

Site was placed on the National Priorities List in September 1983. Remediation continues today.

USEPA Website: Superfund Site/ Cleanup Activities

Why Do We Need This?



The Ugly – “Of particular concern are mishaps occurring at institutions working with the world's most dangerous pathogens in biosafety level 3 and 4 labs.”

“Hundreds of lab mistakes, safety violations and near-miss incidents have occurred in biological laboratories coast to coast in recent years, putting scientists, their colleagues and sometimes even the public at risk”.

USA Today, Inside America's Secret Biolabs, May 28, 2015

Why Do We Need This?

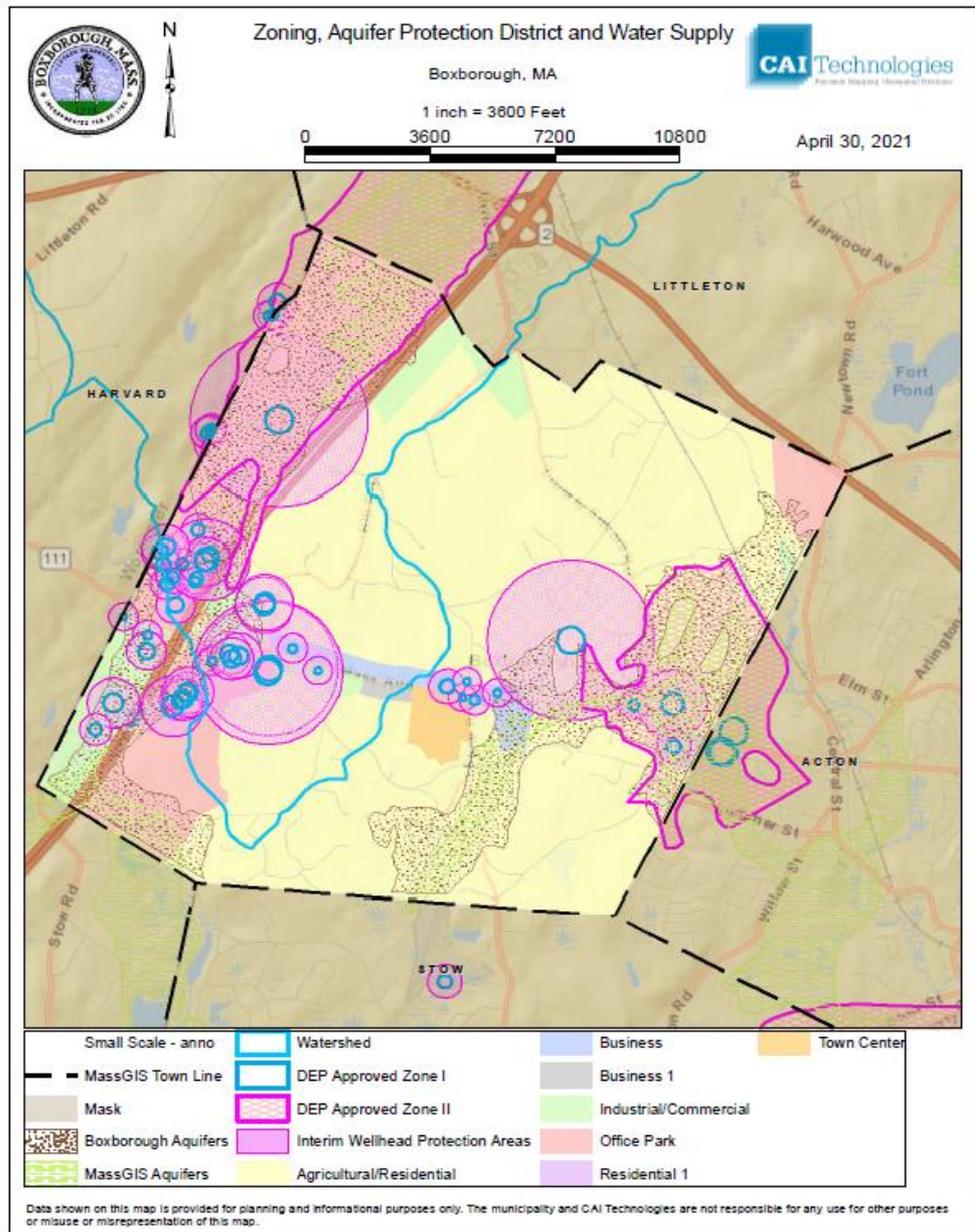
- Current Zoning Bylaw does not contemplate the advent of biotech in Boxborough, nor other related business types that may handle hazardous or infectious materials- They are here!
- Current definitions are not adequate to address both hazardous materials and hazardous waste.
- Current bylaw does not address, nor limit, the use of biological agents.
- Help the town determine where such facilities that handle and or generate hazardous waste and hazardous materials should be allowed.

Benefits

- Aligns with state and federal law for generation, handling, and disposal of Hazardous Materials and Hazardous Waste.
- Aligns with Board of Health's new regulations:
 - Biosafety Regulations prohibit use of regulated biological agents requiring containment of BSL 3 or higher.
 - Groundwater Protection regulations limits types of land uses in public water supply areas.
- Clarifies terminology and adds Uses not previously contemplated and provides guidance as to where such Uses are allowed and not allowed.
- **Is protective of the human and natural environment.**

Groundwater Protection

- Much of our Business, Office Park and Industrial/Commercial Districts are within or proximate to are proximate to Zone 1, Zone 2, IWPA Protection Areas and our Aquifer Protection Districts.
- New BOH Groundwater Protection Regulations prohibit activities that may adversely impact public water supplies. Aligns with MA DEP but focus is on smaller PWS's.



Costs / Savings

- No added cost to the town. May limit future costs necessary to increase fire response for a potential Toxic or Hazardous Materials release and limit severity of impacts associated with a release.
- Limits potential adverse impacts (and potential remediation costs) to our water supply and environment by limiting businesses that operate with more than “incidental” amounts of Toxic and Hazardous Materials.
- Provides guidance to where such uses are allowed and not allowed; will limit confusion for entities locating in Boxborough and encourages Biotechnology companies that meet Biosafety limits, e.g., Vibalogics (BSL-2).

Modifications if Citizens Petition Passes

- Eliminate the Definition of “Life Sciences” since already included in Citizens Petition (definition is same in both Articles)
- Eliminate modification Definition 2169 Research and Development to include the addition of “life sciences” since already included in Citizens Petition.
- Eliminate newly amended Footnote 3 but will add the new language to the new combined Footnote 3/12:
“And provided that use of animals in research, development, testing or training is not any part of the facility.” (Full text of footnote on next slide)

Modifications if Citizens Petition Passes

New Combined Footnote 3/12 add language in bold:

“Provided that use of animals in research, development, testing or training is not any part of the facility and provided that these operations do not use Toxic or Hazardous Materials except as an incidental part of their business. The operation shall provide adequate facilities for storage, containment, and safety in accordance with state and federal regulations for the toxic or hazardous materials used. Toxic or Hazardous Wastes shall be stored and disposed of in accordance with state regulations including, but not limited to, 310 CMR 30.000 and federal regulations, including, but not limited to, the Resource Conservation Recovery Act. Hazardous Wastes shall be disposed of off-site by state-registered hazardous waste transport and disposal contractor(s).

Details of Proposed Bylaw

Definitions and Use Regulations

- Add Definitions for: “Hazardous Waste”, “Hazardous Waste Discharge”, “Health Care Facility”, “Laboratory”, “Medical Center”.
- Add Definition for “Life Sciences” and modify the Definition of Research and Development definition to include the addition of “life sciences”.*
- Replace text of Footnote 3 in the Use Table with combined Footnote 3/12; keep all references to both Footnotes 3/12 but language will be the same for both.
- New Footnote 3/12 applies to all Uses that were subject to Footnote 3 and to new Uses “Health Care Facility”, “Laboratory” and “Medical Center”.
- New Footnote 3/12 for “Research and Development” will be added to the B and B1 Districts.*

** Items from the Citizens Petition that will be adopted as part of the Hazardous Material Bylaw.*

Details of Proposed Bylaw

Biosafety Containment Levels

- Defines biosafety containment levels (BSL), which are a series of protections for biological laboratories established by the National Institutes of Health (NIH) and the Centers for Disease Control (CDC).
- Prohibits laboratories or manufacturing facilities that use biological agents requiring Biosafety Level 3 (BSL-3) or Biosafety Level 4 (BSL-4) containment.
- Aligns with recently promulgated Biosafety Regulations for the Boxborough Board of Health (Adopted April 1, 2021).

Motion to modify language for Section 4004 Prohibited Uses

Minor revised language aligns with Board of Health Biosafety Regulations recently adopted (April 1, 2021):

4004 Prohibited Uses

*No Building, structures or premises shall be used for laboratories **or manufacturing that use biological agents requiring Biosafety Level 3 (BSL-3) or Biosafety Level 4 (BSL-4) containment, with a Biosafety rating that exceeds Biosafety Level 2,** as established by the United States Department of Health and Human Services, Public Health Service, Centers for Disease Control and National Institutes of Health (“CDC-NIH”) under guidelines set forth in the most current edition of CDC-NIH publication entitled “Biosafety in Microbiology and Biomedical Laboratories”, as may be amended, supplemented or replaced from time to time **and the National Institutes of Health Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules published in the Federal Register of July 23, 1976, and any subsequent federal amendments thereto adopted by the Recombinant DNA Advisory Committee (RAC) within the National Institutes of Health (NIH) a.k.a. “the NIH Guidelines”.***

Vote Yes

- Provides greater protection to our residents and employees.
- Consistent with Goals of the Master Plan and priorities for protection of our natural resources.
- Provides guidance to new entities regarding limits associated with hazardous materials, hazardous waste and biosafety containment levels.
- Aligns with state and federal laws and regulations and the Boxborough Board of Health regulations.