

TOWN OF ASHFIELD
ZONING BYLAW FOR LARGE SCALE INDUSTRIAL & COMMERCIAL FACILITIES

Section VI: Use Regulations

G. Large Scale Industrial & Commercial Facilities Zoning Bylaw

1.0 Purpose

The purpose of this Bylaw is to provide for the public health, welfare, and safety of the residents of the Town of Ashfield (the “Town”) through implementation of a zoning bylaw and performance standards for environmental and land use impacts associated with the construction or operation of large scale industrial and commercial facilities proposed to be located in the Town. This bylaw is adopted pursuant to the authority granted to towns in accordance with M.G.L Chapter 40A. Large scale industrial or commercial facilities are also subject to all other requirements of the Town’s Zoning Bylaws and Subdivision Regulations to the maximum extent permitted by law. Specifically the purpose of this Bylaw is to:

- a. Reduce adverse environmental and public health impacts from the construction and operations of large scale industrial and commercial facilities;
- b. Minimize noise, earth removal and related disturbance impacts to surrounding residential properties, businesses, and municipal and institutional facilities;
- c. Preserve the pre-existing character of neighborhoods, especially in rural areas and on agricultural lands adjacent to large scale industrial and commercial facilities;
- d. Avoid exposing residents and public and private property to risk of injury or damage;
- e. Minimize accidental damage to facilities due to man-made events or natural forces such as severe weather events; and
- f. Ensure the construction and operations are in compliance with local, State and Federal requirements.

Application and study requirements required by this Bylaw are in addition to and should be coordinated with any other requirements of Ashfield’s Zoning Bylaws or Subdivision regulations.

2.0 Definitions

Large Scale Industrial and Commercial Facility (LSICF) -- A large-scale industrial or commercial facility is defined as any industrial or commercial facility, including any associated facilities, which requires the mandatory preparation of an Environmental Impact Report (EIR) pursuant to the Massachusetts Environmental Policy Act (MEPA). A LSICF shall also include: (1) any facility

or use that creates 10 or more acres of impervious surface and (2) a facility or use which alters 50 or more acres of land, unless the project is consistent with an approved agricultural use plan or a forest cutting plan in accordance with State law.

Appurtenant Structure, Equipment or Facilities (ASEF) – Any structure, equipment, or other facilities (e.g. parking, contractor’s yards, staging areas, etc.) associated with the construction, operation or maintenance of the LSICF.

Applicant - Owner and/or Operator of the LSICF and/or ASEFs.

Special Permit and Certificate Granting Authority – The Planning Board shall be responsible for granting a Special Permit and issuing a Certificate of Compliance to construct and/or operate a LSICF and/or ASEF if it determines that such facility is in compliance with this Bylaw.

3.0 Applicability

- a. This article applies to all LSICF and ASEFs that will be permitted or constructed after the effective date of the article. This bylaw shall not apply to the maintenance, construction, or improvement of a local road or to any residential use. This bylaw shall not apply to Telecommunication Facilities (see Section VI.F.)
- b. All existing LSICF and ASEFs constructed prior to the adoption of this article shall not be required to meet the requirements of this article, provided that any modification to an existing LSICF or ASEF that occurs after the effective date of this article and which materially alters the size, type, location, or operation of the LSICF or ASEF shall require compliance with this Bylaw, as determined by the Planning Board.
- c. If any part or provision of this Bylaw or the application thereof to any person or business is adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or impair the validity of the remainder of this Bylaw, or the application thereof to other persons, businesses or circumstances unless by operation of law.
- d. An applicant for a proposed LSICF must seek a Special Permit from the Special Permit Granting Authority which is the Ashfield Planning Board. The Planning Board shall conduct a Special Permit process in accordance with Ashfield’s Zoning Bylaws upon receipt of a completed Application and will determine if the proposed LSICF and ASEFs will meet the requirements of this Bylaw. The Planning Board may request additional information needed to determine compliance with this bylaw. The Applicant may not proceed with the construction or operation of the LSICF or ASEFs until a Special Permit has been granted by the Planning Board based on their determination that all the requirements of the Bylaw will be met.

- e. If a project has been determined to be exempt from local zoning due to Federal preemption, the LSICF or the ASEF shall still require a Certificate of Compliance that the project meets the requirements of this bylaw to the maximum extent feasible.
- f. No LSICF or ASEF shall be constructed, installed or modified without also obtaining a building permit and paying any required fees.

4.0 Compliance with Bylaw

- a. No LSICF or ASEFs shall be constructed or operated within the Town unless such facilities can meet all the requirements of this Bylaw. The Planning Board will make this determination based upon the application and any independent studies the Planning Board may require. In order to determine compliance, the Planning Board may require independent noise or engineering studies, air and water quality testing, or other tests or studies to be paid for by the Applicant in accordance with this Bylaw.
- b. The application for a LSICF and ASEFs shall be accompanied by a fee as established by resolution of the Planning Board consistent with State law.
- c. Any modification to an existing LSICF or ASEFs that materially alters its size, type, location, or operation shall require a new Application and must meet all requirements of this Bylaw. Like-kind replacements shall not require a new Application if so determined by the Planning Board.
- d. If the Planning Board finds the Applicant in conformance with this bylaw, the Planning Board may issue a Special Permit. Such Special Permit shall expire three (3) years from the date of issuance if construction has not begun.
- e. When construction is completed and the requirements of this Bylaw and the conditions of the Special Permit have been met, then the Planning Board will issue a Certificate of Compliance for Operation for the LSICF or ASEF which shall have a term of two years. If the Applicant wishes to continue the operation of the LSICF or ASEF beyond the two (2) year term it must request a renewal of the Certificate and demonstrate that the requirements of this bylaw and the conditions of the Special Permit continue to be met.
- f. If no Special Permit is required due to Federal preemption, a renewal of the Certificate of Compliance shall still be needed.

5.0 Pre-Application Conferences

- a. The Applicant (“Owner/Operator”) is strongly encouraged to meet with the staff or municipal officials of the Town to determine the requirements of and the procedural steps and requirements of the Application. The intent of this process is for the Applicant to obtain necessary information and guidance before entering into any commitments or incurring substantial expenses with regard to the site and Application.
- b. The pre-application conference is intended for the benefit of the Applicant in order to address the required submittals and is advisory only and shall not bind the Town of Ashfield.

6.0 Application

The Applicant shall provide to the Planning Board all of the following materials with eight (8) copies and an electronic version:

- a. A narrative describing an overview of the project, including the number of acres to be involved and the location, number and description of the planned facilities, including staging and storage areas and other locations needed during the construction, operation or maintenance of the LSICF and ASEFs.
- b. GIS mapping, in paper and digital versions, at an appropriate scale of the proposed location of the LSICF and ASEFs for the purpose of identifying properties that may be impacted by noise, earth removal or other related disturbances and to inform the Fire Chief, Police Chief, Emergency Management Director, Highway Superintendent and other emergency responders. Included in this map shall be an area within the development site for the location and parking of vehicles and equipment used in the transportation of personnel and/or development and use of the site. Such location shall be configured to allow the normal flow of traffic on public roads to be undisturbed.
- c. The contact information of the Applicant and if different, the organization and individuals responsible for the construction, operation and maintenance of the LSICF and ASEFs shall be provided to the Planning Board and all emergency responders. Such information shall include a phone number where such individual or individuals can be contacted 24 hours per day, 365 days a year. Annually, or upon any change of relevant circumstances, the Applicant shall update such information and provide it to the Planning Board, Select Board and all emergency providers.
- d. A certification or evidence satisfactory to the Town that, prior to the commencement of any activity related to the LSICF or ASEFs, the Applicant shall have accepted and complied with any applicable bonding or permitting requirements. Bonding shall be

required to ensure repair by the Applicant of any damage to municipal property including but not limited to roads, culverts, bridges, water or sewer facilities, cemeteries, and buildings caused by the construction, operation or maintenance of the LSICF and ASEFs.

- e. A description of and commitment to maintain safeguards that shall be taken by the Applicant and its agents to ensure that the Town's roads and property utilized by the Applicant shall remain free of dirt, mud and debris resulting from construction, operation or maintenance activities and the Applicant's assurance that such roads or property will be promptly repaired, swept or cleaned if damage, dirt, mud or debris occur as a result of Applicant's usage, with guaranties that meet the requirements of §13.0 of this article.
- f. Verification that a copy of the Applicant's "Operation's Preparedness, Prevention and Contingency Plan" for public health and safety has been provided to the Planning Board and all emergency responders, including a statement that the Applicant/Owner, upon changes occurring to the Operation's Preparedness, Prevention and Contingency Plan, will provide to the Town and all emergency responders a revised copy marked with the revision date.
- g. Assurance that, at least 30 days prior to the commencement of any construction activities, the Applicant shall provide an appropriate site orientation and training course of the Operation's Preparedness, Prevention and Contingency Plan for all emergency responders. The cost and expense of the orientation and training shall be the sole responsibility of the Applicant. The Applicant or Owner shall be required to hold at least one site orientation and training course every six months under this section unless such requirement is waived by the Planning Board and Select Board in their sole discretion.
- h. A copy of the documents submitted to the Massachusetts Department of Environmental Protection (MassDEP) and a Community and Environmental Impact Analysis meeting the requirements set forth in §7.0 of this article.
- i. A copy of all permits and plans from the appropriate Federal, State, and/or local regulatory agencies or authorities issued in accordance with applicable laws, environmental requirements and regulations for the proposed use.
- j. A traffic impact study and roadway maintenance and repair agreement meeting the requirements set forth in §10.0 of this Bylaw.
- k. Assurance that before the commencement of any construction, operation, maintenance or emergency activities, information shall be provided to residents and businesses per the requirements in §9.0 of this Bylaw.

- I. Certification that private freshwater well testing will be completed in compliance with §11.0 of this article.
- m. Submission of a Water Withdrawal Plan identifying the source of the water, how many gallons will be used and withdrawn each day, the origination of the water, proposed truck routes, and all permits issued by the Commonwealth or any other governmental body. The site(s) for the treatment and disposal of the water shall also be identified.
- n. Submission of a Hazardous Materials Management Plan that includes a complete list of chemicals, pesticides, herbicides, fertilizers, fuels, and other potentially hazardous materials to be used or stored on the premises in quantities greater than those associated with normal household use. For those activities using or storing such hazardous materials, a Hazardous Materials Management Plan shall be prepared and filed with the Fire Chief, Police Chief, Emergency Management Director and the Board of Health. The Plan shall include: provisions to protect against the discharge of hazardous materials or wastes to the environment due to spillage, accidental damage, corrosion, leakage, or vandalism, including spill containment and clean-up procedures; provisions for indoor, secured storage of hazardous materials and wastes with impervious floor surfaces; evidence of compliance with the Massachusetts Hazardous Waste Management Act 310 CMR 30, including obtaining an EPA identification number from the Massachusetts Department of Environmental Protection; and proposed down-gradient location(s) for groundwater monitoring well(s), should the Planning Board or Board of Health deem the activity a potential groundwater threat.
- o. Submission of a Stormwater Management, Erosion and Restoration Plan to the Planning Board and Conservation Commission that addresses any pre-construction, construction, operation or maintenance activities. The clearing of natural vegetation shall be limited to that which is necessary for the construction, operation, and maintenance of the LSICF and ASEFs. Revegetation shall be provided for restoration areas required for construction but not necessary for ongoing maintenance or operations. Only native species typically found in the facility's environment may be used for restoration. Stormwater management shall meet all MADEP requirements and shall follow MADEP's Best Management Practices.

All Application materials shall be submitted to the Planning Board with copies sent to the Select Board, Conservation Commission, Board of Health, Zoning Board of Appeals, Fire Chief, Police Chief, Emergency Management Director and Highway Superintendent. Such boards and municipal officials shall have 45 days to identify concerns or deficiencies or to provide recommendations to the Planning Board with respect to the LSICF or ASEFs. The Planning Board shall hold a Public Hearing to provide interested parties with the opportunity to comment in accordance with the requirements of the Special Permit process. If no Special Permit is required due to federal preemption, a Public Meeting will be held at least 30 days before the issuance or denial of the Certificate of Compliance.

7.0 Community and Environmental Impact Analysis & Health Impact Assessment

- a. A Community and Environmental Impact Analysis Statement shall be submitted to the Planning Board to determine compliance with the requirements of this Bylaw and shall be drafted by a qualified environmental engineering consultant hired by the Applicant. The purpose of the statement is to determine the impact of the project on the environment of the existing site and the resultant changes the proposal will have on the site and surrounding area. This information will assist the Town to determine if the LSICF and ASEFs can meet the requirements of this Bylaw. The Town can also request a “peer review” of the Community and Environmental Impact Analysis by a qualified environmental engineering firm that the Planning Board selects at the Applicant’s expense (see Section 8.0). At a minimum, the statement shall provide the following information:
 - i. A description of the proposed development, its purpose, a schedule of construction and length of operation. This information and technical data must be sufficient to allow a thorough assessment of the proposed LSICF and ASEFs impacts on municipal services, environmental resources and public health and safety during construction and operation.
 - ii. A comprehensive description of baseline environmental and infrastructure conditions including but not limited to ambient noise levels, air and water quality, stormwater and drainage patterns, and water and sewer infrastructure before any activities associated with the development occur.
 - iii. A description of the environmental impacts of the proposed development both during and after complete build out of the proposed development. This description should focus on the environmental resources most likely to be affected by the development proposal and on the broader regional aspects of the environment impacts, including ecological inter-relationships. These impacts shall be defined as direct or indirect changes in the existing environment and as either beneficial or detrimental. Whenever possible, these impacts should be quantified. This discussion should include the impact not only upon the natural environment but upon land use as well.
 - iv. Provide a separate analysis of all potential hazard impacts and hazard areas that could be caused by man-made accidents and natural hazards (flooding, hurricanes, earthquakes, tornadoes, snow/ice storms) and their probabilities and risks, with supporting statistics developed by an analysis of similar LSICF and ASEF’s in comparable locations.
 - v. A discussion of measures which are required by Federal, State or local regulations to protect or mitigate impacts upon the environment, including any associated

research or monitoring. Include sufficient documentation and supporting material to demonstrate that the proposed measures will function as expected.

- vi.** A discussion of the unavoidable adverse impacts described in Subsections 7.b. and 7.c. — both the short-term impacts (i.e., those occurring during build out of the LSICF and ASEF's), the long-term impacts, and the cumulative impacts to the environment. Particular attention should be paid to the LSICF and ASEF's relationship to trends of other LSICF or ASEF's developments (i.e., cumulative noise or air quality degradation posed by other industrial or commercial development).
 - vii.** Hydrologic analysis and information, including, but not limited to, a description, inventory, analysis and evaluation of the existing groundwater conditions and mapping of surficial geology. This analysis must be focused in terms of both surface water and groundwater quality and quantity; a discussion of likely and possible changes to these resources; and a discussion of measures to reduce or mitigate the identified impacts. Potential impacts on residents and businesses served by private wells located within 750 feet of the proposed LSICF and ASEFs (see Section §11.0) should be included in the analysis.
 - viii.** Odor, vapors or particulate matter produced by the LSICF and ASEF's shall not exceed Federal or State air quality standards. Applicant shall identify all hazardous pollutants that will be emitted that affect air quality that are regulated by MassDEP or the EPA. For all air pollutants generated, Applicant shall hire a qualified consultant to perform air quality testing in accordance with Section 11.c.
- b. The express standards and conditions referenced herein shall be addressed by the Applicant and submitted with the Application. An escrow account for the review by professional consultants pursuant to M.G.L. Chapter 44, Sec. 53G shall be established by the Applicant in the initial amount of \$100,000 or such other amount as the Planning Board may determine. The escrow account shall be maintained following final approval of the Application to provide for inspections in accordance with §8.0 herein.
 - c. The Applicant shall conduct a Health Impact Assessment of the proposed project as part of the Community Impact Analysis. An HIA is a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of the project on the health of a population and the distribution of those effects within the population. The HIA shall provide recommendations on mitigating, monitoring and managing those effects.

8.0 Professional Consultants

The Town may employ a professional consultant or consultants to conduct peer reviews of the proposal or to perform and/or review the testing and monitoring results in accordance with M.G.L. Chapter 44, Sec. 53G, at the expense of the Applicant.

- a. The function of the peer review consultant(s) shall be to advise, counsel, represent and/or aid the Town in ensuring compliance with this Bylaw, any other applicable municipal codes on such matters relating to the construction or operations of LSICF and ASEFs, and with State law and regulations applicable to the project . The Consultant shall identify best practices for the design and development of the project.
- b. During the construction, operation, maintenance, decommissioning or reclamation activities associated with the LSICF and ASEFs, the Town shall require the services of an on-site inspector with proven background and experience in the type of LSICF and ASEFs proposed to be constructed, whose role will include but not be limited to the following:
 - i. Review of all applications for construction or operation of the LSICF and ASEF.
 - ii. Inspection of the site of the LSICF or ASEFs during key phases of construction.
 - iii. Inspection of LSICF or ASEFs upon receipt of a written complaint and request for an inspection by the property owner.
 - iv. Communication with appropriate municipal personnel if the inspector believes the Applicant, Operator or contractor is violating a municipal code addressed in this Bylaw or another bylaw of the Town or any other State or Federal law or regulation.
 - v. Authority to request and receive any records, logs, reports relating to the status or condition of the LSICF and ASEFs needed to determine compliance with this Bylaw.
 - vi. In the event a professional peer review consultant is employed for the purpose of advising, counseling or representing the Planning Board relative to ensuring compliance with this Bylaw, the cost for such services of the professional consultant shall be assessed against and paid for by the Applicant or Owner of the LSICF or ASEF in addition to any other consulting fees or charges assessed pursuant to this Bylaw.
- c. A consultant(s) shall be hired to perform and/or review the testing and monitoring results collected pursuant to Section 11 and will prepare a report summarizing those results and identifying any concerns. Such reports shall be submitted to the Select Board, Planning Board and Board of Health, and as appropriate MADEP.

9.0 Information Provided to Municipal Officials and Residents

Prior to the commencement of any construction activities of the LSICF and ASEFs, but no later than ninety (90) days prior, the Operator shall provide the following information to the Select Board, Planning Board, Board of Health, Fire Chief, Emergency Management Director and Highway Superintendent. For natural gas transmission lines and associated venting, metering and compressor stations, the potential impact area appropriate for the diameter and maximum allowable operating pressure for the proposed pipeline will be determined and GIS mapping of the impacted areas will be provided to the Town and residents in those zones as well as information on what to do or not do in the event of an emergency.¹

- a. A GIS map of the location of the LSICF and ASEFs and a copy of the plans prepared by a professional engineer or land surveyor licensed in the Commonwealth of Massachusetts showing the proposed location of all construction activity including equipment and structures and all permanent improvements for the LSICF or ASEFs including any post-construction surface disturbance in relation to natural resources and public or private property in the surrounding area. Following the construction of the LSICF and ASEFs, "as-built" drawings based on surveys completed by a professional surveyor and stamped by a Professional Engineer shall be provided to the Select Board, Fire Chief, Police Chief, Emergency Management Director and Highway Superintendent. Both large scale paper copies and digital versions shall be provided at an appropriate scale.
- b. A detailed description of the planned operations at the LSICF and ASEFs.
- c. The contact information for the construction manager and/or Operator of the LSICF and ASEFs.
- d. The availability of the construction manager and/or Operator to hold a meeting with residents and municipal officials to allow for questions and answers. The meeting(s) shall be held at least three months prior to the start of construction and monthly thereafter until completion of construction.
- e. Applicant will identify any aspect of construction or operations of the LSICF or ASEFs that will cause a disturbance such as noise, vibration, pollution, erosion, etc. Applicant will certify that it will provide notice of any planned blasting, venting of gas or release of other hazardous materials at least 2 weeks in advance. Any venting of gas or release of other hazardous materials, erosion, or other disturbance created as a result of an emergency shall be reported to the Planning Board, Select Board and Board of Health within 24 hours of the event.

¹ A Model for Sizing High Consequence Areas Associated with Natural Gas Pipelines by Gas Research Institute and C-FER Technologies, 2000

In addition, each resident, business or other non-residential use within 1,000 feet of any construction or staging area and any resident identified to be in a hazard zone (e.g. explosion, fire, etc.) shall be provided with information about the hazards and what to do in the event of an emergency. Residents within 1,000 feet of any construction or staging area and any resident identified to be in a hazard zone will be notified by the Applicant of public meetings scheduled to answer questions.

10.0 Road Use and Construction Site Access

The Operator shall provide a traffic impact study or description of the plan for transportation and delivery of equipment, machinery, water, chemicals, products, materials, water products and other items that may be utilized or produced in the siting, construction, completion, alteration or operation of the LSICF and ASEFs and maintenance after construction is completed. Such description shall include the following:

- a. A map showing the planned vehicular access route to the development, indicating all private access roads, all state, county and local roads, bridges and other transportation infrastructure that may be used, and the type, weight, number of trucks, and delivery schedule necessary to support each phase of the development.
- b. A list of all trucking contractors or employees of the Applicant who will travel to and from the development site with evidence of required registrations, licenses and insurance coverage.
- c. The proposed routes must be designed to ensure adequate capacity for existing and projected traffic volumes, allow for efficient movement of traffic, including appropriate turning radii and transition grade, and minimize hazards to users of public roads as well as adjacent property and human activity.
- d. To the maximum extent feasible, vehicle access to any construction or staging area proposed in the vehicular access plan should be an arterial or collector road.
- e. Use of local roads for construction vehicle access serving primarily residential neighborhoods requires written permission from the Select Board (see 12.a.i.) and MassDOT and must be in compliance with M.G.L. Chapter 85, Section 2.
- f. The Planning Board in consultation with the Select Board and Highway Superintendent reserves the right to designate alternate routes in the event the Applicant's proposed routes are deemed inadequate, unsafe or overly disruptive to normal vehicular traffic by a Massachusetts registered professional engineer working on behalf of the Town.

- g. In accordance with M.G.L. Chapter 90, Section 17C, the Select Board may reduce speed limits on local roads that may present public safety hazards for trucks hauling construction materials.
- h. The Applicant and Operator of the LSICF and ASEF's shall execute a roadway maintenance and repair agreement with the Town and post a bond in a form acceptable to the Planning Board, Select Board and its Town Counsel prior to beginning any work on the LSICF or ASEFs (see §13.0 of this Bylaw).
- i. The roadway maintenance and repair agreement shall require the Applicant and Operator to conduct an inventory, analysis and evaluation of existing conditions on Town roads, culverts and bridges along the proposed transportation route, including photography, video and core boring. The roadway maintenance and repair agreement will identify the responsibilities of the Applicant and Operator to prepare, maintain or repair Town roads, culverts or bridges before, during and immediately after construction and during operation of the LSICF and ASEF. The Applicant and Operator shall take all necessary corrective action and measures as directed by the Planning Board or Select Board pursuant to the agreement.
- j. Beginning with its intersection with a public road, any access road for the LSICF or ASEFs shall be improved in accordance with Planning Board, Select Board or Conservation Commission requirements to prevent water pollution and soil erosion or damage to roads. No water, sediment or debris shall be carried off-site onto any public or private property. If any substantial amount of mud, dirt or other debris is carried onto public property from the development site of the LSICF or ASEFs, the Operator shall immediately stop work, clean the mud, dirt or debris and implement a remedial plan as directed by the Planning Board, Conservation Commission or Select Board to manage stormwater and prevent runoff of mud, dirt or other debris onto public property including roads, wetlands and surface waters. Operator will be responsible for the clean-up of any sediment or debris carried onto private property if clean-up is requested by the private property owner and permission for access is given.
- k. All-weather access roads suitable to handle emergency equipment may be provided and maintained in accordance with the directions of the Select Board in consultation with the Fire Chief, Police Chief, Emergency Management Director and the Conservation Commission.
- l. The Operator shall take necessary safeguards to ensure appropriate dust control measures are in place.
- m. All applicable permits or approvals must be obtained, including access or driveway permits, to State, county or local roads, construction permits within State, county or local roads, and permits for overweight or oversize loads. Access directly to State roads

may require MassDOT highway occupancy permits for overweight vehicles. The Applicant shall provide to the Planning Board and Select Board a copy of State permits and all other applicable permits or approvals.

- n. A suitable off-road area within the development site for vehicles to stand while gaining access to and from the LSICF and ASEF development site shall be provided so that the normal flow of traffic on public or private roads is undisturbed. Ingress and egress points to the development site from any public road shall be located and improved in order to meet the requirements of the 2006 MassDOT Project Development and Design Guide² as amended. Private roads, easements, and driveways may not be used for access to the LSICF and ASEF development site unless written permission from the property owner is obtained and a copy of such permission is provided to the Planning Board and Select Board prior to the issuance of the Special Permit.
- o. The Operator shall take all necessary precautions to ensure the safety of persons in areas established for road crossing and/or adjacent to roadways (for example, persons waiting for public or school transportation). Where necessary and permitted, during periods of anticipated heavy or frequent truck traffic associated with the development, the Operator will provide flagmen in accordance with 701 CMR Section 7.0 to ensure the public safety and shall include adequate signs and/or other warning measures for truck traffic and vehicular traffic.

11.0 Water, Noise & Air Testing & Monitoring

- a. **Water.** The Applicant and Operator of a LSICF and/or ASEFs shall provide the Planning Board, Select Board, and Board of Health with the results of a pre-construction and post-construction water analysis and flow rate for each existing public freshwater well within 750 feet³ of the LSICF and/or ASEFs, and for each private freshwater well within 750 feet of the LSICF and/or ASEFs provided that written permission is given by the property owner. If surficial geology warrants a greater testing area, the Planning Board or Board of Health can direct the Applicant and Operator to conduct testing for additional wells within the larger area provided that written permission is given by the property owner. The tests shall conform to the following requirements and all costs to conduct the testing, including any restoration of the property, and the testing results will be provided to the property owner free of charge:

²<https://www.massdot.state.ma.us/highway/DoingBusinessWithUs/ManualsPublicationsForms/ProjectDevelopmentDesignGuide.aspx>

³ MADEP Interim Wellhead Protection Area default radius for non-community sources for non-transient wells (NTNC).

- i. Water samples must be collected and analyzed utilizing proper sampling and laboratory protocol from an independent MassDEP certified water testing laboratory.
 - ii. Well samples shall be analyzed and flow rates (gpm) determined prior to any construction activity to document baseline water quality data and flow rates of the well, especially before any planned blasting.
 - iii. If permission is granted in writing by the property owner, a post-construction sample analysis shall be submitted for water quality testing by the Operator within three months after construction is completed for wells within 750 feet. Wells within 750 feet of the facility or associated structures shall be tested on an annual basis throughout the life of the facility with the results provided to the property owner with a copy to the Planning Board and Board of Health. If surficial geology warrants a greater testing area, the Planning Board or Board of Health can direct the Applicant and Operator to conduct testing for additional wells within the larger area on an annual basis provided that written permission is given by the property owner.
 - iv. Parameters to be tested for include, but are not limited to, methane, chloride, sodium, TDS, pH, arsenic, barium and strontium, radon, and a subgroup of the volatile organic chemicals (VOCs) called BTEX (benzene, toluene, etc.).
 - v. If the results of the pre-construction and post-construction sample analyses indicate that well water contamination, as defined by MA DEP or EPA standards, has occurred or flow rates have been reduced, the owner of the well should file a complaint against the Owner/Operator with the regional MassDEP office with a copy to the Town Board of Health. The Owner/ Operator shall be required to conduct clean-up activities or repair or replace the well affected. After clean-up activities are conducted, the well shall be tested monthly for the contaminants listed in 11.d. for a 24-month period to ensure that the clean-up has been properly completed. The well(s) shall be tested annually thereafter with the permission of the property owner.
 - vi. LSICFs or ASEFs that do not use any hazardous materials for their operations may request a waiver of water quality testing after the post-construction analysis has been completed if post-construction testing results find no decline in water quality or production rates in comparison to the base line water quality data. Such waiver must be approved by both the Planning Board and Board of Health.
- b. **Noise.** The Applicant and Operator shall test and monitor the noise resulting from the LSICF and ASEFs:

- i. Prior to the construction or operation of a LSICF and ASEFs, the Applicant shall identify ambient noise levels at the property line of each residential and business structure located closest to the proposed facility within a ¼ mile radius and at public buildings, schools, medical, emergency or other public High On-site Population locations closest to the proposed facility within a ¼ mile radius. For linear facilities such as pipelines, ambient noise level shall be measured at a minimum every ½ mile along the proposed route 300 feet away from the edge of the proposed easement and at each residence and business located within ¼ mile of the proposed easement. Any testing proposed to be completed on private property requires the written permission of the property owner. “Ambient” noise is defined as the background A-weighted sound level that is exceeded 90% of the time and the background C-weighted sound level that is exceeded 90% of the time measured during a 2 hour time period during the quietest part of the day or night (day 7:00 a.m. to 7:00 p.m.; night 7:00 p.m. to 7:00 a.m.). All testing required by this Bylaw shall be done by a qualified licensed professional acoustical engineer paid for by the Applicant. All testing shall be done in accordance with the professional standards of the appropriate accrediting agencies and the sound level meter used in conducting any evaluation shall meet the American National Standard Institute's standard for sound meters or an instrument and associated recording and analyzing equipment. The Planning Board may have the results of the noise testing “peer reviewed” in accordance with §8.0 of this Bylaw.
 - ii. The Applicant shall provide to the Planning Board and Board of Health documentation of the established ambient noise levels prior to starting construction of a LSICF or ASEF.
 - iii. Complaints received by the Town shall be addressed by the Applicant and Operator of the LSICF or ASEF within 24 hours following receipt of notification by continuously monitoring for a period of 48 hours at the nearest property line to the complainant's residential or public building or 100 feet from the complainant's public building, school, medical, emergency or other High On-site Population public location or facilities, whichever is closer. Any testing proposed to be completed on private property requires the written permission of the property owner. The Applicant and Operator shall report the findings to the Planning Board and Board of Health and shall mitigate the problem to the allowable level of noise if the noise level exceeds the allowable standard (see Section 12. i.).
- c. **Air.** For all air pollutants generated, Applicant shall hire a qualified consultant to perform air quality testing to be conducted on a daily, weekly or more frequent basis at any LSICF or ASEF emission location including Compressor Stations, Metering Stations or Venting Stations located in the Town during the operation of the facility to protect public health and safety. Ambient air quality monitoring station(s) should be installed at least a year prior to the construction and operation of the LSICF or ASEF's in order to establish baseline conditions. Air quality reports should be provided to the Town and if requested by the State, to State officials on a monthly basis at a minimum.

12.0 Design, Installation & Reclamation

a. Access.

- i. To the maximum extent feasible and in accordance with State law, construction vehicle access to the LSICF and ASEFs shall be from an arterial or collector road. Unless permission is granted by the Select Board, no LSICF or ASEF construction or operations site shall have access solely through a local road.
- ii. Accepted professional standards pertaining to minimum traffic sight distances for all access points shall be adhered to.

b. Structure height.

- i. Permanent structures associated with the LSICF and ASEFs shall comply with the height regulations for the zoning district in which the LSICF or ASEF is located.
- ii. There shall be an exemption to the height restrictions contained in this section for the temporary placement of construction equipment necessary for the construction of a LSICF or ASEFs. The duration of such exemption shall not exceed the actual time period of construction or re-construction of the LSICF or ASEF.
 - (a) The time period of such exemption shall not exceed six months.
 - (b) The Operator shall give the Planning Board and Select Board prior written notice of at least 30 days before the beginning date for its exercise of the exemption.

c. Setbacks. Surface land uses affiliated with the LSICF or ASEF and all supporting equipment and structures shall be setback a minimum of seven hundred and fifty (750) feet from residential buildings and all commercial, industrial and institutional uses or a minimum of five hundred (500) feet from the nearest lot line, whichever is greater. Setbacks in areas of "High On-site Populations" shall be increased to $\frac{1}{4}$ mile (1,320 feet). The Planning Board shall determine whether setbacks should be increased beyond $\frac{1}{4}$ mile if the area that could be impacted in the event of an accident at the LSICF or ASEF is greater than $\frac{1}{4}$ mile. High On-site Populations⁴ are defined in the footnote below. Applicants that cannot comply with the setback requirements can request a waiver from the Planning Board to reduce the setback distance but must notify in writing any property owner(s) within the setback area that would be impacted by the requested reduction.

d. Screening and fencing. The Applicant shall provide a plan prepared by a registered Landscape Architect licensed in Massachusetts showing landscaping proposed to be

⁴ High on-site populations are defined as the following: retirement housing; assisted living facilities; congregate living facilities; convalescent services; parks, churches, detention facilities; day care services (commercial); hospitals; medical offices exceeding 5,000 sq. ft. of gross floor area; and educational facilities (public or private) that pose a public safety concern due to the characteristics of the occupants, development, or site that would make evacuation difficult in the event of an emergency.

installed to screen and buffer surface land uses affiliated with the LSICF and ASEFs. The landscape plan shall incorporate the use of native vegetation, including evergreens, shrubbery and trees, which shall be of sufficient density to screen the facility. Security gates and/or fencing as appropriate to ensure public safety shall be installed after consultation with the Planning Board, Select Board, Fire Chief, Police Chief and Emergency Management Director with openings no less than 12 feet wide. Any fence installed shall be surrounded by native vegetation to provide screening. Existing vegetation in proximity to LSICF and ASEFs shall be preserved to the greatest extent possible. Emergency responders shall be given means to access all LSICF and ASEFs in case of an emergency. Warning signs shall be placed on the security gates or fencing associated with the LSICF or ASEFs, providing notice of the potential dangers and the contact information in case of an emergency.

- f. Lighting. To minimize night time light pollution, no LSICF and ASEFs shall be artificially lighted except as required for emergency night time access or by the FAA. Beacon light permitted only if required by the FAA with evidence of this FAA requirement submitted with the application. Any other lights shall be full-cutoff down lighting and shall be shielded so as to prevent intrusion upon roads and nearby properties.
- g. Shadow & Flicker. Wind Energy Facilities shall be located in areas that do not result in any shadowing or flickering on off-site inhabited buildings. The applicant has the burden of proving that any shadowing or flickering on off-site inhabited buildings will not occur.
- h. Odor. No LSICF and ASEFs shall produce odors detectable beyond its property boundaries.
- i. Noise. The Applicant and Operator shall minimize, to the extent possible, noise resulting from the LSICF and ASEFs and will conduct testing and monitoring as outlined in Section 11.b.:
 - i. The noise generated during the LSICF or ASEF operations shall comply with the provisions of the Massachusetts Department of Environmental Protection's, Division of Air Quality Noise Regulations (310 CMR 7.10), as amended, or the provisions of this Bylaw, whichever is more restrictive.
 - ii. A source of sound will be considered in violation of this Bylaw if the source:
 - (a) increases the broadband sound level by more than 5 dB(A) above ambient pre-construction noise levels during construction activities and subsequent operations or increases the broadband sound level by more than 5 dB(C) above the pre-construction ambient noise level during construction activities and subsequent operations; or
 - (b) produces a "pure tone" condition, when an octave band center frequency sound pressure level exceeds the two (2) adjacent center frequency sound pressure levels by three (3) decibels or more; or

- (c) results in sound or noise levels at any time greater than 35 dB(A) during the day or 30 dB(A) at night (typical range 30-40 dB(A) for rural or quiet residential areas); or
- (d) for low frequency sounds or noise with octave center frequencies at or below 125 Hz, results in a maximum noise level outside the property boundary greater than 40 dB(C)
- iii. Exemption from the standards established in this subsection may be granted by the Planning Board during the construction stages of a LSICF or ASEF development for cause shown and upon written agreement between the Applicant and the Planning Board. However, any such exceedances of the noise standards shall not be allowed between 7:00 p.m. and 7:00 a.m.
- iv. LSICF and ASEFs shall be constructed and operated to mitigate sound levels and shall install devices or use other equipment to mitigate sound levels to ensure that the noise level standards at residential or public buildings, medical, emergency or High On-site Population locations are not exceeded.

g. Hours of operation. Except for emergency operations, hours of construction activities or operation at a LSICF or ASEFs are limited to Monday through Friday, 7:00 a.m. to 7:00 p.m. and not permitted on weekends or legal holidays. Truck traffic related to the construction or operations of the LSICF or ASEFs shall be allowed only during these hours of operation. Exemption from the standards established in this subsection may be granted by the Planning Board for cause shown and upon written agreement between the Applicant and the Town.

h. Reclamation/restoration of all disturbed areas.

- i. Reclamation shall be initiated as soon as weather and ground conditions permit after construction or re-construction of a LSICF or ASEFs, and reclamation shall be completed no more than six months after this point.
- ii. Reclamation shall be carried out on all disturbed areas and achieve the following objectives:
 - (a) Final soil profiles shall be designed to equal or reduce soil erosion potentials over stable pre-operation conditions, and final land forms shall be stable;
 - (b) Preexisting visual character of site shall be restored or enhanced through planting of local or adaptive vegetation. Invasive species shall not be considered acceptable; and
 - (c) Disturbance of soil cover shall be minimized.

i. Prohibitions.

- i. No LSICF or ASEF shall be allowed to be constructed or operated in the floodway (see *diagram*) designated as such in the Flood Insurance Study (FIS) and shown on the Federal Emergency Management Agency (FEMA) FIRM maps dated 7/2/80 or any successor maps issued by FEMA.

- ii. Construction or operation of a LSICF or ASEFs outside of the floodway but in the one-hundred-year floodplain is discouraged but may be permitted by the Planning Board in its discretion if the following provisions are met:
 - (a) The Applicant must provide conclusive documentation that no other location is more appropriate for location of the LSICF or ASEF other than a location within the floodplain.
 - (b) An adequate emergency evacuation plan shall have been produced by the Applicant and filed with the Town.
 - (c) No storage of chemicals shall be permitted within the floodplain. An exemption from this requirement may be granted by the Planning Board, in consultation with the Board of Health, if the Applicant and Operator can show that such storage will not potentially cause any harm to property, persons or the environment in the case of a one-hundred-year flood, and further provides security to the Town ensuring the Applicant's and Operator's ability to remedy any damage or injury that may occur.
 - (d) Only necessary and needed structures will be permitted within the floodplain.
 - (e) All structures within the floodplain shall be designed to withstand a one-hundred year storm event.
 - (f) An engineer registered in Massachusetts and qualified to present such documentation that the LSICF or ASEF will not cause additional flooding on adjacent, upstream and/or downstream properties shall provide such documentation to the Town.
 - (g) The Applicant has received approval from the Conservation Commission if required.

13.0 Performance Bond, Insurance and Indemnity

- a. Performance Bond or Escrow Account. The Applicant shall submit to the Town a Performance Bond from a surety authorized to do business in the State to cover any damage to public property that occurs as a result of the construction of the LSICF and any ASEF's in an amount and for a term (e.g. construction period plus 2-3 years) determined by a professional engineer and acceptable to the Town. In addition, the Applicant shall provide a bond or establish an escrow account that will ensure that all testing and maintenance provisions required during the life of the LSCIF or ASEF facility are completed in accordance with this bylaw and any agreement with the Planning Board related to the LSCIF and/or ASEF.

The bonds shall provide, but not be limited to, the following condition: there shall be recoverable by the Town, jointly and severally from the principal and surety, any and all

damages, loss or costs suffered by the Town in connection with the Applicant's geophysical operations within the Town. The rights reserved to the Town with respect to the bond are in addition to all other rights of the Town, and no action, proceeding or exercise of a right with respect to such bond shall affect any other rights of the Town.

- b. Insurance. Prior to conducting any operations hereunder, the Applicant, Operator and its contractors shall furnish certificates of insurance to the Planning Board showing the Town as an additional insured with respect to operations conducted within the Town and showing liability insurance covering commercial, personal injury, and general liability in amounts not less than \$1,000,000 per person, \$10,000,000 per occurrence, and \$10,000,000 property damage. The Applicant and Operator shall also provide certificates of insurance to the Planning Board and Select Board showing the Town as an additional insured under general liability umbrella insurance with a minimum amount of \$10,000,000.
- c. Indemnity. The Applicant shall protect, indemnify, defend and hold the Town, its officers, employees, agents and representatives harmless from and against all claims, demands and causes of action of every kind and character for injury to, or death of, any person or persons, damages, liabilities, losses and/or expenses, occurring or in any way incidental to, arising out of, or in connection with the Applicant or its contractors', agents', or representatives' construction or operation of the LSICF or ASEF, including attorneys' fees and any other costs and expenses incurred by the Town in defending against any such claims, demands and causes of action. Within 30 days of receipt of same, the Applicant and/or Operator shall notify the Town in writing, of each claim for injuries to or death of persons, or damages or losses to property occurring or in any way incidental to, arising out of, or in connection with the Applicant's or its contractors', agents', or representatives' operations conducted or associated with the LSICF or ASEFs. At the Town's discretion, the Town may conduct an independent investigation, monitor, and review the processing of any such claim, to ensure that such claim is handled as required herein.
- d. Notwithstanding anything contained herein to the contrary, construction and/or operation of the LSICF or ASEF is not allowed until a copy of all Bonds, Insurance Certificates, Agreements or Studies required by this Bylaw have been completed and provided to the Planning Board, Select Board and Town Counsel. The Performance Bond and the Certificates of Insurance must also be filed with the Town Clerk.

14.0 Removal Requirements and Abandonment

- a. Any LSICF or ASEF which has reached the end of its useful life or has been abandoned consistent with Section 14.0 of this bylaw shall be removed. The Owner and/or Operator shall physically remove the installation no more than 180 days after the date of discontinued operations. The Owner or Operator shall notify the Planning Board by

certified mail of the proposed date of discontinued operations and plans for removal.
Decommissioning shall consist of:

- i. Physical removal of all LSICF or ASEF structures, equipment, security barriers and transmission lines from the site.
- ii. Disposal of all solid and hazardous waste in accordance with local, State, and Federal waste disposal regulations.
- iii. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Planning Board may allow the Owner or Operator to leave landscaping or designated below-grade foundations or structures in order to minimize erosion and disruption to vegetation.
- iv. Absent notice of a proposed date of decommissioning or written notice of extenuating circumstances, the LSICF or ASEF shall be considered abandoned when it fails to operate for more than one year without the written consent of the Planning Board and Select Board. If the owner or Operator of the LSICF or ASEF fails to remove the installation in accordance with the requirements of this section within 180 days of abandonment or the proposed date of decommissioning, the Town retains the right, after the receipt of an appropriate court order, to enter and remove an abandoned, hazardous or decommissioned LSICF or ASEF. The Applicant and Operator shall agree to allow entry to remove an abandoned or decommissioned installation. The Town's cost for the removal may be charged to the property owner in accordance with the provisions of M.G.L. 139.
- v. The Owner/Operator of a LSICF or ASEF shall provide a form of surety, either through an escrow account, bond or other form of surety approved by the Planning Board and Select Board in consultation with Town Counsel to cover the cost of removal in the event the Town must remove the installation and remediate the landscape, in an amount and form determined to be reasonable by the Planning Board and Select Board, in consultation with a Professional Engineer and Town Counsel, but in no event to exceed more than 125 percent of the cost of removal and compliance with the additional requirements set forth herein, as determined by the Applicant and the Town. Such surety will not be required for municipal or State-owned facilities. The Applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

15.0 Violations and Penalties

- a. Any owner, Operator or other person who violates or permits a violation of this Bylaw shall pay to the Town a fine of \$300 per violation plus, to the extent permitted by law, all court costs, including, but not limited to, reasonable attorney's fees, incurred by the Town on account of such violation. Each day a violation exists shall constitute a separate offense. Further, the appropriate officers or agents of the Town are hereby authorized to issue a cease and desist notice and/or to seek equitable relief, including injunction, to enforce compliance herewith.

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