BOARD OF SELECTMEN

Policy on Policies

Original Date: November 9, 1988

1988-5

Revised: January 23, 1990 (1990-1) Revised: November 22, 1993 Reaffirmed: January 16, 1996 Reaffirmed: February 2, 1998 Revised: January 16, 2001 Reaffirmed: March 9, 2004 Revised: March 23, 2004 Revised: August 14, 2007 Revised: August 11, 2015

Proposals for new policies or changes to an existing policy can be initiated by any Board member, employee or citizen. Proposals shall be submitted in writing to the Chairman of the Board of Selectmen through the Town Administrator who shall place them on a meeting agenda for consideration

For the purpose of efficient drafting, a new policy or a policy revision considered by the Board shall not be adopted at the meeting at which it is introduced, but shall require additional readings at subsequent meetings before adoption is final.

Revocation of an entire policy may be voted on at the same meeting during which it is initially discussed.

SCHEDULE FOR ADOPTION OF POLICY

- 1. A topic or amendment is proposed and placed on the agenda by a Board member or the Town Administrator. The Board votes that the topic is worthy of formulation as a policy, or that amending a policy is a good idea.
- 2. The Town Administrator prepares a draft of the policy and sends it to department heads and other appropriate members of Town government for review and comment. If necessary, the Town Administrator refers the proposed policy to Town Counsel.
- 3. The draft of the proposed policy or policy amendment is placed on the agenda. The Board discusses it and then votes on it. If further amendment is necessary, they vote on the final draft at a subsequent meeting.
- 4. This process shall take no longer than eight weeks.

CATALOGING OF POLICIES:

Include the original, effective date of the policy and the dates of any subsequent revisions. Have the title clearly and briefly identify the content so that it will be easy to find in the table of contents.

List the policies in alphabetical order in the table of contents.

All new policies or substantial changes in an existing policy shall be published in the annual report of the Town.

TOWN OF WELLFLEET

ORGANIC LAND MANAGEMENT POLICY

RATIONALE FOR REDUCING FERTILIZER AND PESTICIDE USE

Fertilizer causes excessive algal growth in waterways, reducing oxygen available to aquatic plants and wildlife. Pesticides and herbicides accumulate in the food chain, contaminating shellfish and marine mammals. An average acre of well-maintained urban lawn is estimated to receive an input of five to seven pounds of pesticides. These chemicals can pose a danger if they run off of the lawn during a rain event and are then carried into nearby storm drains and flow to our rivers, beaches, bays, and estuaries.

In addition to eliminating concerns raised by pesticide exposure on Town properties frequently used by residents and tourists, the adoption of Organic Land Management Policy additionally benefits the Town of Wellfleet, MA, by reducing nutrient loading that can pollute the Town's inland and coastal waters. In addition to surface water impairment, nutrient enrichment of groundwater is a concern for environmental and human health. While this policy restricts the use of synthetic fertilizers, it is important to note that even organic fertilizers when used improperly can have a negative effect. The overall goal with the fertilizer portion of the policy is to promote strategies that will result in low dose natural fertility practices designed to minimize any negative effects from excessive use. Although not part of this policy, phosphorus should be acknowledged as a matter of concern. Practices should be adopted that allow phosphorus inputs based on soil test data. If sufficient phosphorus is available in the soil for the plant in question, the choice should be for an organic phosphorus-free fertilizer.

Losses of nitrogen from lawn fertilizers contribute to nitrate-nitrogen in drinking water supplies. There are potential human health issues with elevated nitrate such as methemoglobinemia in infants and possible cancer risks for the general populace when nitrate is converted to nitrite forming nitrosamines.

The Mass. Estuaries Project acknowledges that as much as 20% of nitrogen loading in watersheds can be sourced to fertilizer. While nitrogen loading is anticipated to have an ever increasing impact on the economic, ecological, and aesthetic values as the Cape region approaches build out and will presumably impact tourism and property values regionally, concerns regarding pesticide exposure and nutrient/nitrogen loading related to lawn/turf practices can be quickly remediated by transitioning to a natural management approach.

Current conventional lawn care practices do not adequately reflect these water quality concerns and chemical fertilizer recommendations have not adjusted to reflect our unique circumstances and reliance on a sole-source aquifer. The difference between natural organic fertilizers and conventional or synthetic fertilizers is distinctive. Synthetic fertilizer is inorganic and is manufactured during a chemical process that produces a highly water-soluble fertilizer which breaks down on contact with soil moisture and is taken up

by the grass plant very rapidly, works quickly, and then leaves the root zone. This process is directly feeding the grass plant. There are ways to slow down this release, but they are synthetic in nature. Most synthetic fertilizer programs call for numerous applications annually. Of concern is the fact that it is estimated that only thirty-five percent of the nitrogen makes a positive impact on the plant. Sixty-five percent is lost to leaching to groundwater or volatilization back to the atmosphere. The nitrogen in natural, organic fertilizers is in the organic form. Natural organic fertilizers feed and nourish the microbes, so that they in turn, through the natural processes of mineralization and nitrification, make the nitrogen and other nutrients available to the plant. In essence they feed the soil that feeds the plant. The nutrients in organic fertilizers are either plant, animal or mineral based, with the nitrogen derived from plant or animal sources. It is important to note that fertilizer is not plant food, but rather a catalyst that influences photosynthesis and other plant functions. It is the process of photosynthesis that produces carbohydrates and sugars. These are the "foods" that sustain the plant.

Unlike the synthetic fertilizer, where the soluble nitrate is generally rapidly released, the natural forms release more slowly and thus avoid nitrogen runoff. Organic fertilizers are less concentrated, but have longer lasting benefits because they gradually release nutrients. Synthetic fertilizers are more concentrated which makes over-fertilizing, burning the plant or turf, and damage to the soil food web, and run-off into waterways more likely. Organic fertilizers offer an additional benefit of minimizing water use and recycling waste that would otherwise contribute to pollution.

Attractive, stress-tolerant natural turf requires an adequate supply and balance of essential plant nutrients and a slightly acid soil pH, which can be addressed following an initial soil test and recommended application of various soil amendments and organic, non-synthetic fertilizers including, but not limited to, liquid fish hydrolysate, kelp/seaweed, an OMRI or NOFA-approved granular fertilizer, horticultural molasses, humic acid, compost, compost tea, mycorrhizal and microbial inoculants.

SECTION I – FINDINGS AND PURPOSE

The Board of Selectmen of the Town of Wellfleet does hereby find that:

All pesticides are toxic to some degree and the commonplace, widespread use of pesticides is both a major environmental problem and a public health issue; and

All citizens, and in particular children, as well as other inhabitants of our natural environment, have a right to protection from exposure to hazardous chemicals and pesticides in particular; and

A balanced and healthy ecosystem is vital to the health of the town and its citizens, and as such is also in need of protection from exposure to hazardous chemicals and pesticides; and

When an activity raises threats of harm to the environment or human health, precautionary measures should be taken, even if some cause and effect relationships are not yet fully established.

It is in the best interest of public health and the environment to eliminate the use of toxic pesticides on Town - owned lands, ponds and waterways; to encourage the reduction and elimination of the use of toxic pesticide on private property; and to introduce and promote natural, organic cultural and management practices to prevent and, when necessary, control pest problems on Town-owned land.

Accordingly, the Board of Selectmen declares that the purposes of this Organic Land Management Policy are (1) to protect the public health by restricting the use of hazardous chemicals and pesticides on Townowned land (2) to protect ground water, bays and estuaries, and drinking water supplies from damage

caused by synthetic water-soluble fertilizers (3) to offer to the residents of the Town of Wellfleet the safe use of public land, (4) to encourage the reduction and elimination of the use of toxic pesticides and synthetic chemical fertilizers on private property.

SECTION II - Authority

This Organic Land Management Policy is promulgated under the authority granted to the Town of Wellfleet Board of Selectmen under Massachusetts General Law providing that Boards may make reasonable policy and under the authority granted to the Town of Wellfleet Board of Selectmen to make policy for the protection of public health, safety and the environment.

SECTION III - DEFINITIONS

The following words and phrases, whenever used in this Organic Land Management Policy, shall be construed as defined in this section:

OLM shall mean Organic Land Management

Organic Land Management is a problem-solving strategy that prioritizes a natural, organic approach to turf grass and land management without the use of toxic pesticides and synthetic chemical fertilizers. It mandates the use of natural, organic cultural practices that promote healthy soil and plant life as a preventative measure against the onset of turf and landscape pest problems. This approach will eliminate or significantly reduce the use of, and exposure to, pesticides in the management of lawn areas, playing fields and landscapes. Furthermore, it will mitigate the potentially negative impacts of landscape management on local waterways, air quality and ecosystems.

This protocol will rely on a systems-based approach that integrates soil health and plant vigor into proper cultural practices. The goal is to put a series of preventative steps in place that can naturally attenuate pest issues before they become a significant concern. Careful monitoring for pests and the development of threshold levels within this system will allow for easier control of pest problems if and when they do arise.

Essential OLM practices include, but are not limited to:

- regular soil testing;
- addition of approved soil amendments and approved organic fertilizers as necessitated by soil test results, following, but not limited to the guidelines set forth by the Organic Land Care Program of the Connecticut Northeast Organic Farmers' Association (CT NOFA) and/or the Organic Material Review Institute of Eugene, OR (OMRI), and/or the National Organic Program (NOP) or the equivalent;
- under the above guidelines, material inputs exist and are allowed for the management of plant nutrition and the management of pests should that be necessary;
- selection of plantings using criteria of hardiness; suitability to native conditions; drought, disease and pest-resistance; and ease of maintenance;
- modification of outdoor management practices to comply with organic horticultural science, including scouting, monitoring, watering, mowing, pruning, proper spacing, and mulching;
- the use of physical controls, including hand-weeding and over-seeding;
- the use of biological controls, including the introduction of natural predators, and enhancement of the environment of a pest's natural enemies;
- through observation, determining the most effective treatment time, based on pest biology and

- other variables, such as weather and local conditions; and
- eliminating pest habitats and conditions supportive of pest population increases.

Pesticides are defined by the Massachusetts Department of Food and Agriculture Pesticide Bureau as: "substances or mixtures of substances that prevent, destroy, repel, or mitigate pests, or defoliate, desiccate, or regulate plants." Pesticides are poisonous substances that can have an adverse effect on the environment or impair human health. Pesticide is the umbrella term that encompasses many different products that includes, but is not limited to, herbicides, fungicides, and insecticides. It is acknowledged that while some information is known about these materials, there is a substantial unknown, including many inert ingredients. All pesticides except those that appear on the EPA 25(b) exempted list are subject to this policy. Pesticides considered minimum risk products that appear on the EPA Toxicity Category III & IV lists may be considered for an exempted use. Those products that meet the criteria for inclusion on the EPA Toxicity Category 1 & II lists are permanently prohibited.

<u>Pests</u> are and may be known as undesirable plants, insects, fungi, bacteria, and rodents, birds and other animals. Common examples in turf grass and the landscape can be, but are not limited to, crabgrass, knotweed, poison ivy, chinch bugs, grubs, and a variety of plant pathogens.

<u>Fertilizer</u> is any organic or inorganic material of natural or synthetic origin that is added to a soil to supply one or more plant nutrients essential to the growth of plants. Fertilizers are broadly divided into organic fertilizers (composed of enriched organic matter—plant or animal), or inorganic fertilizers (composed of synthetic chemicals and/or minerals).

Organic fertilizer includes naturally occurring organic materials, or naturally occurring mineral deposits. They are typically composed of material produced through the decomposition process, animal by-products, or grains. Organic fertilizers improve biodiversity and long-term productivity of soils. Organic nutrients increase the abundance of soil organisms and can drastically reduce external inputs of pesticides, energy, water, and fertilizer.

Synthetic fertilizer is most often produced using the Haber-Bosch process, which produces ammonia as the end product. This ammonia is used as a feedstock for other nitrogen fertilizers, such as anhydrous ammonium nitrate and urea. Artificial nitrogen fertilizers are typically synthesized using fossil fuels such as natural gas and coal, which are limited resources. Synthetic fertilizers are produced in ways that theoretically cannot be continued indefinitely. The resources used in their production are non-renewable.

<u>Biosolids</u> are the organic materials resulting from the treatment of sewage sludge (the name for the solid, semisolid or liquid untreated residue generated during the treatment of domestic sewage in a treatment facility). When treated and processed, sewage sludge becomes biosolids. Biosolids may contain undesirable substances such as heavy metals and pharmaceuticals.

SECTION IV - PROHIBITION

The use and application of toxic chemical pesticides (as defined in this Policy) by the Town of Wellfleet employees and/or by private contractors, for managing lawns, turf, ornamental beds, and trees is prohibited on all Town-owned lands unless an exemption has been granted. This includes all pesticides of known and unknown hazard.

The use and application of synthetic chemical fertilizers (as defined in this Policy) by the Town of Wellfleet employees and/or by private contractors, for managing nutrition in lawns, turf, ornamental beds, and trees is prohibited on all Town-owned lands. This includes the synthetic highly water-soluble forms of nitrogen, the synthetic products that are coated to slow the release of nitrogen, and the synthetic products

that are secondarily reacted with formaldehyde to become insoluble. Aside from the negative aspects of contamination, these products are simply counter-productive to managing a system organically.

The use and application of biosolids (as defined) by the Town of Wellfleet employees and/or by private contractors, for managing nutrition in lawns, turf, ornamental beds, and trees is prohibited on all Townowned lands.

SECTION V - CONTROL OF POTENTIAL PEST PROBLEMS

Organic Land Management practices, i.e. natural, organic turf and landscape cultural practices and maintenance, shall be the method of choice to understand, prevent and control potential pest problems;

Control products and nutrition management products used under the terms of this Policy shall be those products on the approved list of Organic Land Care Program of the Connecticut Northeast Organic Farmers' Association (CT NOFA) and/or the Organic Material Review Institute of Eugene, OR (OMRI), and/or; the National Organic Program (NOP), and/or the equivalent as determined by the Board of Health.

SECTION VI - INVENTORY OF PESTICIDES, SYNTHETIC FERTILIZERS, and BIOSOLIDS

A registry of all pesticides, synthetic fertilizers and biosolids currently stored in or on Town-owned premises shall be compiled by the Director of the Department of Public Works who shall have authority to order the disposal of any such products deemed unnecessary to be stored within the Town, such disposal to be through the County's Hazardous Wastes Collection program or otherwise.

SECTION VII - EXEMPTIONS

All outdoor pest management activities taking place on Town of Wellfleet-owned land shall be subject to this Policy, except as follows:

- 1. Pesticides otherwise lawfully used for the purpose of maintaining a safe drinking water supply at drinking water treatment plants and related collection, distribution, and treatment facilities.
- 2. Pesticides in contained baits or traps for the purpose of rodent control.
- 3. Pesticides classified by the United States Environmental Protection Agency as exempt materials under 40CRF 152.25, or those pesticides of a character not requiring FIFRA regulation.
- 4. The use of chemical controls as approved in advance and in writing by the Town Administrator in the event of a public emergency only as determined by the Board of Health; provided, however, that such authority to grant a temporary waiver shall be limited to a period of thirty days. Any waiver in excess of thirty days as to any one emergency may be extended for an additional period not to exceed six months but only by a vote of the Board of Health. All waivers granted shall be reported to all members of the Board of Health no later than one business day following the issuance of the waiver. Notice of all such waivers shall be posted, in the manner provided for notice of public meetings, within two business days following the issuance of the waiver. Any waiver granting the use of pesticides on Town land shall require the use of Integrated Pest Management protocol as defined in Addendum I and shall specify the use of a specific pesticide(s) determined to be the least toxic material for the specific application. The Board of Health shall determine if such a waiver is warranted based on the following criteria: a) the pest situation poses a threat to human or animal health and/or environmental quality; b) reasonable OLM efforts, if any, have been attempted; and c) viable alternatives consistent with this Policy do not exist.

Any Town department or contractor granted a waiver hereunder shall comply with all applicable laws, rules and regulations of the Commonwealth of Massachusetts including, but not limited to those requiring notification to site users, abutters, and the proper method for storage, application, and posting.

SECTION VIII: TRAINING AND EDUCATION

All Town of Wellfleet personnel involved in the evaluation, approval, or implementation of organic turf and landscape maintenance and/or outdoor pest control should receive training and education in natural, organic cultural and technical methods.

In addition to immediately reducing the impacts of chemical pesticides and fertilizers within the Town of Wellfleet, the adoption of the Organic Land Management Policy by the Town serves as an appropriate model for residents and businesses to encourage the voluntarily adoption of the same organic practices on their own properties for the betterment of all town residents and visitors.

SECTION IX: COMPLAINTS

- A. The Town of Wellfleet shall investigate complaints received about any practices or acts that may violate any provision of this Policy.
- B. If the Town of Wellfleet finds that an investigation is not required because the alleged act or practice is not in violation of this Policy, the Town shall notify the complainant of such finding and the reasons upon which it is based. The Town shall provide a report of all such complaints and findings to the public upon request.
- C. If the Town of Wellfleet finds that an investigation is warranted, the Town shall investigate and if the Town finds that there has been a violation of this Policy, then the Town of Wellfleet shall be authorized to take such action and institute such proceedings as are provided by law.

SECTION X - OTHER APPLICABLE LAWS

This Organic Land Management Policy shall not be interpreted or construed to permit the application or use of pesticides or other hazardous materials where such use or application is restricted by other applicable health, environmental, safety or fire codes, regulations or statutes.

SECTION XIII - SEVERABILITY

If any provision, clause, sentence or paragraph of this Organic Land Management Policy or the application thereof to any person or circumstances shall be held invalid, such invalidity shall not affect the provisions of the Organic Land Management Policy that can be given effect without the invalid provision, clause, sentence, or paragraph, and to this end the provisions are declared to be severable.

SECTION XI: EFFECTIVE DATE

This Policy shall be effective upon publication.

ADDENDUM I:

INTEGRATED PEST MANAGEMENT DEFINED FOR USE IN EMERGENCY

Organic Land Management (OLM) strives first and foremost to prevent pest and disease problems by using natural organic maintenance practices.

When an issue arises that could be a threat to human health or the environment, an IPM approach may be considered. Integrated Pest Management (IPM) promotes the use of non-chemical methods for pest prevention and management, such as physical, mechanical and cultural controls. Least-toxic pesticides may be selected for pest control only after all other reasonable non-chemical methods have been exhausted.

This protocol will rely on a Systems Based Approach that integrates soil health and plant vigor into proper cultural practices. The goal is to put a series of preventative steps in place that can naturally attenuate pest issues before they become a significant concern. Careful monitoring for pests and the development of threshold levels within this system will allow for easier control of pest problems if and when they do arise. As such, this protocol is knowledge-based, relying on pest/disease morphology to establish the proper procedures for maximizing a healthy system. This protocol should mitigate most serious pest pressures.

When a pest has not been satisfactorily controlled by the above strategies, then a least-toxic pesticide may be used. Preference is strongly given to the use of Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) section 25(b) minimum risk pesticides listed by the U.S. Environmental Protection Agency (EPA), whenever feasible. If satisfactory control cannot be achieved with 25(b) products, then natural products or synthetic products registered by the EPA as Toxicity Category III or IV, denoted by the signal word "Caution" on the registration label, should be chosen. This choice would be by appeal to, and at the discretion of, the Board of Health.

The following steps outline the basic approach used in an IPM program with respect to public health issues.

- Monitoring and scouting for the pest in question;
- Accurate record-keeping documenting any potential pest problems;
- Evaluation of the site with regard to any injury caused by a pest in question and a determination made on which course of treatment to follow;
- Chosen treatment to be the least damaging to the general environment and one that best preserves the natural ecosystem;
- Chosen treatment to be the most likely to produce long-term reductions in pest control requirements. The effective implementation must be operationally feasible, and must be cost effective in the short and long term;
- Chosen treatment must minimize negative impact to non-target organisms;
- Chosen treatment must be the least disruptive of natural controls available.
- Chosen treatment must be the least hazardous to human health.

TOWN of WELLFLEET ORGANIC LAND MANAGEMENT POLICY SUMMARY

It is our understanding that all pesticides are toxic to some degree and the widespread use of pesticides is both a major environmental problem and a public health issue. Federal regulation of pesticides is no guarantee of safety.

We recognize that the use of pesticides may have profound effects upon humans, wildlife, and the environment in the vicinity of treated areas. We recognize that all citizens, particularly children, have a right to protection from exposure to hazardous chemicals and pesticides.

We recognize that synthetic water-soluble fertilizers contaminate ground water, bays and estuaries, and drinking water supplies. We value these resources and recognize that alternative soil-enhancement methods exist and can provide solutions to environmental as well as economic challenges facing the Town.

We recognize that it is in the best interest of public health to eliminate the use of pesticides and synthetic fertilizers on town-owned lands; to encourage reduction and elimination of pesticide and synthetic fertilizer use on private property; and to introduce cultural management practices to enhance plant growth and prevent and, when necessary, address pest problems on town-owned land.

It is our understanding that Organic Land Management (OLM) is a problem-solving strategy that utilizes a natural, organic approach to turf grass and land management without the use of toxic pesticides and synthetic/chemical fertilizers resulting in sustainable and attractive landscapes.

By virtue of adopting the policy referred to as the Town of Wellfleet Organic Land Management Policy, the Town of Wellfleet commits to refrain from the use of pesticides and synthetic fertilizers upon property it owns, uses, or controls, except in situations that pose an imminent threat to public health. The adoption of this Policy serves as a model for residents and businesses, encouraging voluntary adoption of organic practices and compliance with guidelines and materials approved by the Organic Material Review Institute (OMRI) of Eugene, OR. We commit to provide education on OLM techniques to Town of Wellfleet personnel involved in the evaluation, approval, or implementation of organic turf and landscape maintenance and/or outdoor pest control as we pursue the implementation of a policy supported by the guidance document: The Town of Wellfleet Organic Land Management Policy.