

TOWN OF EASTHAM

POLICY ON ORGANIC MANAGEMENT OF MUNICIPAL LANDS

I. Purpose

The purpose of this policy is to codify practices the Town of Eastham will use to reduce or eliminate nutrient loading from the application of fertilizers and reduce the threats to public health from the application of pesticides on town-owned properties by Town employees or private contractors of the Town.

II. Background

The Massachusetts Estuaries Project (MEP) found that fertilizers account for a significant portion of of controllable nitrogen load in Cape Cod watersheds. Excessive nitrogen from fertilizers and other watershed sources leads to eutrophication of marine embayments. Other studies have demonstrated that phosphorous from fertilizers can lead to eutrophication in freshwater ponds.

Widespread use of pesticides to control undesirable weeds and insects is both an environmental problem and a public health issue. These compounds accumulate in the food chain contaminating shellfish and marine mammals.

The Town of Eastham is seeking to reduce the share of the watershed nitrogen load resulting from fertilizers as part of nutrient management planning and to protect the public and the ecosystem from toxic pesticides. Reductions in nitrogen loads from fertilizer use is one part of a comprehensive wastewater management strategy and, if successful, could potentially reduce infrastructure costs in future phases of wastewater management implementation.

The Town of Eastham seeks to demonstrate its commitment to reducing nutrient loading from fertilizer and use of pesticides by adopting this policy. The benefits of a municipal policy to reduce the use of fertilizers and pesticides on municipal properties include:

- Setting a positive example for other groups and residents
- Demonstrating that town greens and fields can be maintained without excessive use of fertilizers and pesticides
- Potential reducing of long-term municipal costs by reducing fertilizer and pesticide use/purchase.

III. Identification of Town Properties

This policy applies to all turf and green spaces owned and managed by the Town or by contractors on behalf of the Town including, but not limited to:

- Athletic fields
- Grounds of town buildings
- Memorial squares and planted intersections
- Town greens
- Cemeteries

IV. Practices for Organic Management of Town Land

Whenever the Town chooses to manage the vegetation / turf on town land, the Town hereby agrees to adopt the following best management practices and to require adherence to the practices by any employee or private contractors working on behalf of the Town.

1. Soil Testing

For any property that is managed with water and/or fertilizer, the Town agrees to conduct soil testing and analysis on a biennial or regular basis. Results of the soil analysis shall be used to enhance soil biology in order to reduce the need for fertilizers.

2. Soil Biology

The spreading of composted soil or of microbial products such as compost tea or beneficial nematodes is strongly encouraged as a means of enhancing soil biology.

3. Top Soil and Site Preparation

Any new turf areas developed by the Town should be developed with a minimum of 6 inches of high quality top soil, or in accordance with other professional standards appropriate to the type and planned use of the facility.

4. Grass Type

Whenever possible, hardy and drought resistant grass types such as fine leaf fescues (ie., Hard, Chewing, Creeping, Red and Sheep fescues) or minimal mow mixes should be selected so as to minimize the need for watering, mowing or fertilizing. These grass types also should be used when over-seeding established turf areas. Areas intended for special purposes such as athletic fields should use such a grass type appropriate for the intended type and intensity of use.

5. Maintenance Practices

For any property that is managed with water and/or fertilizer the following maintenance practices should be followed:

- Turf areas should be mechanically weeded and aerated annually, preferably in the spring
- Over-seeding of turf areas should be undertaken every spring or fall. Hardy and drought resistant grass types such as fine leaf fescues (ie., Hard, Chewing, Creeping, Red and Sheep fescues) and minimal mow mixes should be used for over seeding unless an alternate grass type is required for an athletic field;
- Turf should be mowed to a height of 3 inches unless otherwise specified for a special use such as an athletic field;
- Mowed clippings should not be bagged and should be left to mulch.

6. Irrigation

Watering should only be undertaken if necessary. If possible, sprinkler systems should be designed to use on site wells instead of potable water supply. Irrigation systems should be equipped with rain, moisture, or evapotranspiration sensors, as appropriate.

7. Fertilizer Application

For any property that is managed with water and/or fertilizer the following fertilizer application practices should be followed:

- To the extent possible, only fertilizers with slow release/slowly soluble organic forms

of nitrogen should be used. Fertilizer should be applied in the minimum amount needed for healthy plant growth appropriate to the type and intensity of use of the field or turf area

- Use of compost and compost teas is highly recommended if required equipment is available.
- Fertilizer products should have a minimum of 35% water insoluble nitrogen
- Fertilizer products containing phosphorous should only be used if required in accordance with the results of a recent soil analysis;
- Fertilizers should be applied to benefit the spring and fall heavy growth periods; Fertilizers should not be applied after October 31st or before April 15th unless required in accordance with the requirements of athletic fields or the results of a soil analysis.

8. Pesticides

Definition: 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.

Use: The DPW Superintendent must determine the necessity and approve the use by any town employee or contractor of any pesticide except pesticides that appear on the EPA 25(b) exempted list. Only those pesticides considered minimum risk products that appear on the EPA Toxicity Category III and IV lists may be approved for use by any town employee or private contractor working for the town.

Prohibited Use: Those products that meet the criteria for inclusion on the EPA Toxicity Category I and II lists are permanently prohibited.

9. Record Keeping

Records will be kept of turf management practices and applications (i.e., amount and frequency of application, nutrient content) for all fields and turf areas that are managed with irrigation and/or fertilizer or pesticides. The DPW Superintendent shall keep a written record of any pesticides used under Section 8 above and will document the public necessity for the use of any pesticides used that are in EPA Category III and IV above.

10. Training

Municipal personnel and contractors involved in turf management are encouraged to attend regular training on techniques and best practices associated with organic turf management and non-toxic means of pest control.