

## **POLICY ON THE CONTENT AND APPLICATION OF FERTILIZERS AND PESTICIDES ON MUNICIPAL LAND IN THE TOWN OF EASTHAM**

### **I. Purpose**

The purpose of this policy is to codify practices the Town of Eastham uses to reduce or eliminate nutrient loading from the application of fertilizers and reduce concerns related to the application of high risk or undesirable pesticides on town-owned properties by Town employees, volunteers or private contractors of the Town.

### **II. Background**

The Massachusetts Estuaries Project (MEP) found that fertilizers account for an important portion 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.

Excessive use of certain pesticides to control undesirable plants and insects is both an environmental problem and a public health issue. Some of these compounds accumulate in the food chain contaminating shell and fin fish.

The Town of Eastham will maintain its commitment to using fertilizers on town land only as allowed under this policy, and limiting pesticide use to non-toxic methods, used only when required to protect public health. The intent of this policy is to provide guidance for town staff whenever active management of land is required as specified in Section III below.

The Town of Eastham is seeking to reduce the share of the watershed nitrogen and phosphorus load resulting from fertilizers as part of nutrient management planning and to protect the public and the natural environment from unnecessary use of toxic pesticides. Reductions in nitrogen and phosphorus loads from fertilizer use is one part of a comprehensive wastewater management strategy and, if successful, could somewhat 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 on the use of fertilizers and pesticides on municipal properties include 1) Setting a positive example for other persons and groups and 2) Demonstrating that town greens and fields can be maintained without the use of fertilizers and pesticides and 3) Reduction of any contribution by the Town of nitrogen, phosphorous and pesticides to the town's watersheds and natural environment.

### **III. Identification of Town Properties Covered by This Policy**

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

- Athletic fields
- Grounds of town buildings

- Memorial squares and planted intersections on town land
- Town greens
- Cemeteries

#### **IV. Practices for 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 these practices by any employee, volunteer or private contractors working on behalf of the Town.

##### 1. Soil Testing

For any property that is managed with 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. Fertilizer will only be applied based on the results of recent soil testing.

##### 2. Compost

The spreading of compost shall be restricted to leaf-based composts because of heavy nitrogen and phosphorus components in other forms of compost.

##### 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 fertilizer the following maintenance practices will be followed:

- Turf areas will be mechanically weeded and aerated annually if personnel are available, preferably in the spring;
- Over-seeding of turf areas will be undertaken in fall and spring if funding is available. 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 will be mowed to a height of 3 inches unless otherwise specified for a special use such as an athletic field;
- As a general rule, mowed clippings will not be bagged and will be left to mulch. However no grass clippings, leaves, or any other vegetative debris will be deposited into or within 25 feet of any water body, retention or detention areas, drainage ditches or storm water drains, or onto impervious surfaces such as but not limited to roadways and sidewalks, except during scheduled clean-up programs.

## 6. Irrigation

Watering will only be undertaken if necessary. Irrigation systems should be equipped with rain, moisture, or evapotranspiration sensors, as appropriate.

## 7. Fertilizer Application

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

- Fertilizer will be applied if needed for healthy plant growth appropriate to the type and intensity of use of the turf area or any ornamental garden and only in the minimum amount needed for this purpose.
- Application of products which contain bio-solids and / or synthetic fertilizer is prohibited.
- Only fertilizers with slow release / slowly soluble organic forms of nitrogen will be used. Use of leaf based compost and a compost tea is highly recommended.
- Fertilizer products should have a minimum of 35% water insoluble nitrogen and conform to the approved list of fertilizers issued by the Organic Materials Review Institute of Eugene, Oregon, the Organic Land Care Program of the Connecticut Northeast Organic Farmers' Association, or the National Organic Program.
- Fertilizer products containing phosphorous will be used only if required in accordance with the results of a recent soil analysis;
- Fertilizers will be applied to benefit the spring and fall heavy growth periods; Fertilizers will not be applied after October 31<sup>st</sup> or before April 15<sup>th</sup> unless required in accordance with the requirements of athletic fields or the results of a soil analysis.
- Fertilizer will not be applied immediately before or during heavy rainfall or when soil is saturated.
- Fertilizer will not be applied, spilled or deposited on impervious surfaces or in a manner that allows fertilizer to enter storm drains or other man-made storm flowage receptacles or channels;
- Fertilizer will not be applied closer than 100 feet to any water body unless permitted by the Eastham Conservation Commission.

## 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." Some pesticides are poisonous substances that can have an adverse effect on the natural 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.

Use: The DPW Superintendent must determine the necessity for, and when appropriate, 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 involved in turf management will be required to attend training on techniques and best practices associated with organic turf management and non-toxic means of pest control.

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