

## Integrated Pest Management Plan

*Presented to the Commission on September 14, 2020*

The Port of Edmonds (the Port) is committed to protecting and enhancing the environment and natural resources of the community we serve. As our Environmental Policy states, we are committed to a long-term policy of continuous improvement in operations, methods and facilities that are economically sustainable and environmentally responsible. Along with our Environmental Policy and Green Port Initiatives, we have implemented an Integrated Pest Management (IPM) approach that formalizes the work that the Port has undertaken and sustained for years.

This approach provides the basis of the Port's Integrated Pest Management Plan (IPMP), presented herein.

The Port is committed to responsible pesticide use, including reduction of use where feasible. We currently use only natural, organic pesticide products when possible and limit use of other chemical pesticides to areas well away from water and other natural resources.

Our IPMP approach is intended to protect the balance of natural systems at the Port and to keep unnecessary chemicals out of the environment through the implementation of an adaptive approach to controlling pests such as insects, rodents, weeds, and plant diseases. The Port employs natural and evaluative processes for pest control to minimize damage to the landscape and the surrounding environment. Chemical treatments are used on a limited basis, with the least toxic chemicals preferred (as determined by manufacturer, agency, and Port testing).

The Port's IPM approach strives to achieve long-term, sustainable prevention of pest problems through regular monitoring to determine when treatment is needed. Public safety and short- and long-term cost effectiveness are also considered when deciding among prevention and treatment options.

Our IPMP approach primarily is applied through landscaping maintenance and animal pest control activities undertaken on Port property.

### **Areas of Port Maintenance Responsibility**

Landscaping maintenance by the Port is conducted at Harbor Square (including indoor plants) and Port property along the Puget Sound waterfront. Areas on Port property not maintained by the Port include the plant beds and pots at Anthony's Restaurant, the Edmonds Yacht Club, and at the Landing Building (which houses Arnie's and other commercial/office businesses).

In addition, the Port does not maintain the perimeter of the Edmonds Marsh. The City of Edmonds is responsible for maintaining the marsh boardwalk, marsh pathway, marsh sewer outfalls and entire marsh perimeter under their IPMP.

The Port is responsible for animal and insect pest control throughout their property and buildings.

## Port IPM Activities

The Port's IPM activities on property for which the Port is responsible include:

- Proper plant care to sustain healthy and disease-resistant plants
- Routine plant monitoring for early pest detection
- Correct plant and animal pest identification and diagnosis
- Understanding pest life cycle and behaviors to target appropriate treatment
- Tolerating harmless pests

Specific landscaping maintenance activities undertaken by the Port include:

- Hand-weeding as needed
- Grass maintenance (i.e. mowing, irrigation)
- Plant and flower bed maintenance
- Shrub maintenance (i.e. along fence lines)
- Tree trimming and pruning
- Pesticide and herbicide application as needed
- Planting of annual and perennials

The Port uses a combination of the following IPM approaches:

- Planting of appropriate vegetation including disease-resistant plant varieties
- Maintaining healthy groundcovers, shrubs, and trees through proper maintenance
- Bark mulching shrub areas and tree wells to retain moisture, reduce weeds, and protect vegetation
- Pruning shrubs and trees to increase air circulation and remove diseased or dead branches
- Removing weeds and other invasive plants by hand weeding or use of mechanical trimmers
- Conducting limited herbicide application to eliminate individual weeds in beds, sidewalks, and paved parking surfaces (away from aquatic resources)
- Maintaining general cleanliness of Port property, including garbage containment and frequent pickup, grounds maintenance, litter pickup, and trapping to help reduce pests

Herbicides are applied only by staff that possess a State Certified Applicator License and under conditions that preclude over spraying (wind, other air disturbance) and who have been trained, licensed, and certified through the Washington State Department of Agriculture (WSDA). Training includes requirements for safe practices, knowledge of and adherence to labeling instructions, compliance with state laws, and recordkeeping. Licenses are renewed annually with a total of 40 educational credits to be acquired within a five-year period for recertification. These requirements ensure that staff are qualified to assess, recommend, and implement IPM actions in a safe and effective manner.

The Port retains one full-time staff position (40-hours per week) for landscape maintenance and a commercial pest control contractor for pest (animal) control (one visit per month). Both are trained and qualified in the IPM activities and evaluations listed above.

Under our IPMP, the Port (or its pest management contractor) will:

- Identify pests in the most specific terms possible
- Learn about the individual pest's habits, life cycle, needs, and dislikes
- Take steps to exclude the pest from the area, if possible
- Try to remove the pest's food, water, and shelter
- Determine the pest's travel patterns and find their home-base
- Identify all your control options (the "tools in the toolbox") before acting

Resources include the U. S. Environmental Protection Agency, National Pesticide Information Center, and Washington State Department of Ecology, among others.

### **Making Pest Control Decisions**

As a first line of pest control, the port's IPMP will focus on **prevention** to prevent pests from becoming a threat, including selecting pest-resistant plant varieties, planting pest-free rootstock, and avoiding plants used as food by rodents and other animal pests. These control methods can be very effective and cost-efficient and present little to no risk to people or the environment.

The Port's pest control decisions are based on **threshold and action levels**. Threshold levels refer to the point at which a pest population will cause unacceptable impact to public safety, natural or managed ecosystems (including aesthetic value and economic damage), or to the function or service life of facilities, as determined by the Port, using appropriate resources. Action levels refer to the point at which action must be taken to prevent a pest population at a specific location from reaching the threshold level.

Action and threshold levels are determined by the Port, based on observations and recommendations by staff and pest control contractors. These recommendations are derived through specific knowledge gained from pest control certifications and qualifications, as well as appropriate federal, state, and other agency resources.

Once preventive methods are no longer effective or available, and monitoring, identification, and action and thresholds limit assessments indicate that pest control is required, the Port will evaluate the proper control method both for effectiveness and risk. Effective, less risky pest controls will be chosen first, including chemical that disrupt pest mating, or mechanical control, such as trapping or weeding. If further monitoring, identifications, and action thresholds indicate that less *risky* controls are not working, then additional pest control methods would be implemented, such as targeted spraying of pesticides. Broad spraying of non-specific pesticides remains a last resort.

The Port tested individual chemical and natural herbicides for use on Port property in 2018. Additional tests are scheduled to determine the least risky effective herbicides available for Port use, including a combination of Avenger and Scythe currently used by the City. In any case, the Port decided in 2019 to discontinue and prohibit the use of the herbicide Roundup on Port property, even though it was used in very limited quantities away from aquatic resources.

The Port is committed to reviewing and updating its IPMP, procedures, approaches, and philosophies as IPM practices evolve. The Port's IPMP will be periodically reviewed along with the Port's Environmental Policy and Green Port Initiative to assure currency with environmental regulations and best practices and remains reflective of community interests.