

Petersburg Vessel Owners Association

PO Box 232

Petersburg, AK 99833

Phone & Fax: 907.772.9323

pvoa@gci.net • www.pvoaonline.org

August 26, 2013

Commissioner Patrick J. Kemp
Alaska Department of Transportation & Public Facilities
PO Box 112500
3132 Channel Drive
Juneau, Alaska 99811-2500

Via email: dot.commissioner@alaska.gov

RE: Herbicide and Pesticide applications in Southeast Alaska

Dear Commissioner Kemp:

Petersburg Vessel Owners Association (PVOA) is a diverse group of over 100 commercial fishermen and businesses operating primarily in Southeast Alaska. Our members provide millions of meals to the public annually by participating in a variety of fisheries statewide including salmon, herring, halibut, cod, crab, black cod, shrimp, and dive fisheries.

Regulations adopted earlier this spring would allow state agencies to apply herbicides and pesticides on state property and rights of way without obtaining a permit from the Department of Environmental Conservation (DEC) and without public review. The broad application of herbicides and pesticides can and does affect aquatic habitats; the habitat necessary for the production of commercially harvested species that our members are entirely dependent upon for their livelihood. As such, PVOA is in opposition to the broad-based spraying of herbicides or pesticides on state property and rights of way and is in support of the efforts by the Petersburg Borough (RE: Petersburg Borough August 19 letter) and other Home Rule local governments to prohibit such actions on lands within their community boundaries.

The seafood industry and the State of Alaska have invested millions of dollars in marketing efforts publicizing the sustainability, and health benefits of consuming wild Alaska seafood. The foundation of that marketing effort is based on and is absolutely dependent upon Alaska's pristine waters uncontaminated with toxic chemicals. Alaska seafood is not only consumed locally, but is marketed globally. Any suspicion that Alaska seafood may be contaminated with pesticide/herbicide residue could do irreparable harm to that marketing effort, the seafood industry in general and the PVOA membership specifically.

Upon review of the Integrated Vegetation Management Program (IVMP), particularly Table 1, POTENTIAL HERBICIDES TO BE USED BY ADOT&PF, and our obtaining a recent scientific study of the documented reports on the toxicity of Glyphosate in humans, we have become increasingly concerned about the broad-based spraying of herbicides containing Glyphosates. The IVMP lists those herbicides approved by the EPA for aquatic environments which includes Aquamaster® (active ingredient Glyphosate). Section 6.3, Chemical Control, also states: "ADOT&PF may use Aquamaster, Habitat, and Garlon 3 throughout its right-of-ways, FAA



August 19, 2013

Commissioner Patrick J Kemp, and
Michael J. Coffey, Statewide Maintenance and Operations
Department of Transportation & Public Facilities
PO Box 112500
3132 Channel Drive
Juneau, Alaska 99811-2500

Re: Reply to response to Herbicide and Pesticide applications in the Petersburg Borough

Dear Commissioner Kemp and Mr. Coffey,

We are in receipt of your July 9 letter addressing the Petersburg Borough's June 17 letter of concern regarding the regulations adopted by the State of Alaska allowing for the broad application of herbicides and pesticides on state property and rights of way without first obtaining a permit from the Department of Environmental Conservation and without public review. Unfortunately, we view your reply as totally unresponsive to our concerns. Our concerns are focused on the effects of the contamination of aquatic habitats and the transmission of that contamination into fish and other aquatic resources and seafood that are not only consumed by residents of the Petersburg Borough but are harvested commercially and marketed globally. Regrettably, your letter is merely a reiteration of the Integrated Vegetation Management Program (IVMP) and the regulations allowing the broad-based pesticide/herbicide application. Your letter completely ignores our primary concerns regarding that application and the lack of citizen input into the appropriateness of the application of toxic chemicals to areas where they eventually will enter the aquatic environments. It also ignores our concerns regarding contamination of drinking water, impacts to harvesters of berries and other edibles along roadways, and other concerns.

The seafood industry and the State of Alaska has invested millions of dollars in marketing efforts touting the sustainability, and health benefits of consuming wild Alaska seafood (as was pointed out in our June 17 letter). The foundation of that marketing effort is absolutely dependent upon Alaska's pristine waters uncontaminated with toxic chemicals. Any suspicion that Alaska seafood could be contaminated with pesticide/herbicide residue could do irreparable harm to that marketing effort and the seafood industry itself which is the lifeblood of the Petersburg Borough economy.

Your letter points out that *"DOT&PF has selected broad spectrum herbicides approved by the U.S. Environmental Protection Agency for use in aquatic conditions"*. The IVMP Table 1, **POTENTIAL HERBICIDES TO BE USED BY ADOT&PF**, lists those herbicides approved for aquatic environments which includes Aquamaster® (active ingredient Glyphosate). The IVMP Section 6.3, **Chemical Control**, goes on to state: *"ADOT&PF may use Aquamaster, Habitat, and Garlon 3 throughout its right-of-ways, FAA certified airports, accessible non-certified airports, and facilities in compliance with their EPA approved labels. Both Aquamaster and Habitat may be used to control vegetation within aquatic*

areas, if needed, only after an Alaska Pollution Discharge Elimination System Pesticide General Permit and a Pesticide Use Permit are obtained.” Although the EPA considers herbicides containing Glyphosate minimally toxic to humans and “safe” for use in aquatic environments, a recent study published in the scientific journal *Entropy*¹ sheds a significantly different and disturbing light on that assumption. As stated in the **Abstract**:

“Glyphosate, the active ingredient in Roundup®, is the most popular herbicide used worldwide. The industry asserts it is minimally toxic to humans, but here we argue otherwise... Glyphosate's inhibition of cytochrome P450 (CYP) enzymes is an overlooked component of its toxicity to mammals. CYP enzymes play crucial roles in biology, one of which is to detoxify xenobiotics. Thus, glyphosate enhances the damaging effects of other food borne chemical residues and environmental toxins. Negative impact on the body is insidious and manifests slowly over time as inflammation damages cellular systems throughout the body.”

This peer-reviewed paper, which we were unaware of prior to our June 17 letter, adds to our concerns about the broad-based herbicide use proposed by DOT&PF and has heightened our opposition to that plan. This information has now been broadly disseminated on a variety of news media and should be considered common knowledge. As such, it is likely the public awareness of the use of these herbicides in or near Alaskan waters will have a negative impact on the public's willingness to buy and consume Alaska seafood. This information also increases our concerns regarding exposure of our resident's to these toxins through contaminated drinking water, consumption of contaminated plants, and direct contact with the toxins.

In conclusion, based on your unresponsiveness to our concerns and the additional information we have obtained regarding the toxicity of the permitted herbicides, the Petersburg Borough appears to have no choice but to consider taking regulatory action, via the adoption of ordinances and/or land use restrictions that will ban the large-scale application of herbicides and pesticides within Borough boundaries. We hope that regulatory remedies will not be necessary to stop the large-scale application of herbicides and pesticides within the Petersburg Borough. However, without assurance from the State that application of herbicides and pesticides will not occur within our Borough, we must consider taking that action.

Sincerely,



Mark Jensen
Mayor

¹Samsel, S.; Seneff, S. Glyphosate's suppression of cytochrome P450 enzymes and amino acid biosynthesis by the gut microbiome: Pathways to modern diseases. *Entropy* **2013**, 15, 1416-1463.



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Transportation and
Public Facilities

TRANSPORTATION MANAGEMENT & SECURITY
Office of the Commissioner

3132 Channel Drive
P.O. Box 112500
Juneau, AK 99811-2500
Main: 907.465-3904
Fax: 907.586-8365
Web: dot.state.ak.us

July 9, 2013

Vice Mayor, Susan Flint
Petersburg Borough
P.O. Box 329
Petersburg, Alaska 99833

RE: Response to Herbicide and Pesticide applications in the Petersburg Borough

Dear Vice Mayor Flint:

Thank you for your letter addressing Petersburg Borough concerns regarding the Alaska Department of Environmental Conservation (DEC) rulemaking on the use of pesticides and the Alaska Department of Transportation & Public Facilities (DOT&PF) possible use of pesticides within the Petersburg Borough. Commissioner Kemp has asked that I provide a direct response to you as I am the DOT&PF Statewide Maintenance Engineer and oversee the department's pest and vegetation management programs.

The department is willing to work with you and discuss any plans for the application prior to any use within borough boundaries. While your concerns are understandable, the Integrated Pest Management plan process (outlined in detail below) provides for public notification. DOT&PF's goal of pest management with the least possible hazard to people, property and the environment, by the most economical means, addresses the concerns of your borough and, consequently, should remove the need for the borough to consider the adoption of any special ordinance about the use of herbicides within your jurisdiction.

DOT&PF oversees 254 airports, 11 ferries serving 35 communities, 5,619 miles of highway and 720 public facilities throughout the state of Alaska. The department is focusing on the safest, efficient and most cost effective management of its right-of-way and, in turn, is developing guidelines for Vegetation Control within department right-of-way. The new guidelines will establish maintenance and operations intentions to assure citizens safety while operating in the department's right-of-way and see that DOT&PF right-of-way receives continued and scheduled vegetation control to the extent feasible by the allowable budget.

DOT&PF has recently posted an Integrated Pest Management (IPM) plan with the DEC, which will be internally known as the DOT&PF Integrated Vegetation Management Program (IVMP). IVMP is an effective and environmentally sensitive approach to pest/vegetation management that

relies on a combination of common-sense practices. IVMPs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment.

The new regulation requires that prior to herbicide application the following notification requirements must be met:

- Notification will be provided to ADEC, as required under 18 AAC 90.640(a)(6), not later than 15 days before each proposed application, including multiple application projects, as defined within 18 AAC 90.640(d).
- Two consecutive public notices for planned herbicide applications will be published in a newspaper of general circulation in the affected area, no later than 30 days before the date of scheduled single or multiple application projects as required by 18 AAC 90.640(b).

This notice will include:

- The location of the application
- The complete name and EPA registration number of the herbicide(s)
- The target pests
- The method of application
- For multiple application projects, the approximate number of applications to be made
- How the public can receive more information about the proposed application

Effective vegetation management reduces the risk of functional or structural failure which may contribute to crashes, injury, or disruption to travel. Effective vegetation management will help limit physical obstruction or restricted visibility and can reduce the severity of run-off-road crashes.

DOT&PF objectives in vegetation management within its road system right-of-ways are in accordance with the Guidelines for Vegetation Management, 1st Edition, by the American Association of State Highway and Transportation Officials (AASHTO). These guidelines define three roadside management zones (Zones 1, 2, and 3) from the edge of pavement to improve sight distances, maintain access, protect structures, and reduce wildlife strikes.

The use of herbicide application is expected to significantly improve DOT&PF's ability to manage vegetation upon its road right-of-ways, airports, and facilities. While herbicides are expected to be a useful tool in managing vegetation, we are all citizens who also care about Alaska's environment; herbicide application must be done in an environmentally responsible manner.

In selecting herbicides suitable for DOT&PF use, consideration will be given to habitat conditions in and adjacent to DOT&PF lands. Aquatic habitats, such as wetlands, streams and roadside conveyances, are common upon DOT&PF lands. The boundaries of these aquatic habitats can often only be determined by trained environmental professionals. These aquatic habitats often are hydrologically connected via surface flow to salmon-bearing streams and rivers.

A federal lawsuit in Washington State necessitated environmental reviews of some herbicides and their impact on federally listed salmon species under the Endangered Species Act (ESA). This environmental review has resulted in a list of which herbicides that require a no-spray buffer zone around salmon-bearing streams. While this list was developed to address ESA-listed salmon species in Washington State, DOT&PF will select herbicides that either do not require no-spray buffer zones around salmon-bearing streams or were not included as part of the lawsuit.

Additionally, the climactic conditions throughout the state result in unique soil conditions which can impede the breakdown of some types of herbicides. Given these environmental conditions, DOT&PF has selected broad spectrum herbicides approved by the U.S. Environmental Protection Agency (EPA) for use in aquatic conditions. Those herbicides containing active ingredients which have been shown to have a long residence time within Alaskan soils, such as trifluralin and chlorsulfuron, will be avoided.

Please see the DEC web site (<http://dec.alaska.gov/eh/pest/pe.htm>) or the DOT&PF Maintenance & Operations web site (<http://www.dot.state.ak.us/stwdmno/>) to view the IVMP. If you have any additional concerns regarding the IVMP, please feel free to contact me directly at your convenience.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Coffey", with a stylized flourish at the end.

Michael J. Coffey
Chief, Statewide Maintenance and Operations
Office of the Commissioner

cc: Commissioner Patrick J. Kemp, P.E.



Municipality of Skagway

GATEWAY TO THE KLONDIKE

P.O. BOX 415 SKAGWAY, ALASKA 99840

(PHONE) 907-983-2297 – Fax 907-983-2151

WWW.SKAGWAY.ORG

July 19, 2013

Patrick J. Kemp, Commissioner
Dept. of Transportation & Public Facilities
State of Alaska
P.O. Box 112506
Juneau, AK 99811

RE: ADOT&PF Herbicide Use in the Skagway Borough

The Municipality of Skagway opposes the use of herbicides and pesticides as a maintenance tool for vegetation control measures on Alaska Dept. of Transportation & Public Facilities (ADOT&PF) owned or leased lands and facilities within the Skagway Borough.

About 27% of the land in the Skagway Borough is State-owned and managed; this land includes State Street, Dyea Road and the local airport, all of which are significantly utilized by local residents and seasonal visitors and represent the bulk of the main transportation corridors within the Borough. The care and maintenance of these areas is integral to the viability of the community, and this maintenance has the potential to affect not only Skagway's quality of life, but also the health of its citizens and natural surroundings.

State Street runs through the middle of the Skagway townsite, with residential homes and local businesses bordering it along its entire length. The Dyea Road provides access not only to more residential areas, but also to remote, natural recreational areas that are highly valued by locals. The airport in Skagway is closely bordered on the west side by the Skagway River, and on the east by residential areas.

ADOT&PF's Integrated Vegetation Management Plan of June 2013 specifies that the agency intends to begin using herbicide as a vegetation control tool to "provide improved maintenance service and public safety in a more cost-effective manner." The Municipality of Skagway maintains that the use of herbicides for the maintenance of vegetation has the potential to negatively affect the health and safety of the public as well as the natural environment, at a cost that may be unquantifiable.

The ADOT&PF's vegetation management plan lists alternative preventative and mechanical methods of vegetation maintenance that include mowing, brush cutting, hydro-axing and

burning. The Municipality of Skagway asks that these alternative methods are solely used in the maintenance of vegetation in the Skagway Borough, as they are highly preferable for maintaining the quality of life and health of the borough's citizens and natural surroundings and for substantially reducing possible negative effects known to be caused by the use of herbicides.

Sincerely,

A handwritten signature in black ink, reading "Stan Selmer". The signature is written in a cursive style with a large, stylized "S" at the beginning.

Stan Selmer
Borough Mayor



HAINES BOROUGH, ALASKA

P.O. BOX 1209 • HAINES, ALASKA 99827

Administration 907.766.2231 • (fax) 907.766.2716

Tourism 907.766.2234 • (fax) 907.766.3155

Police Dept. 907.766.2121 • (fax) 907.766.2128

Fire Dept. 907.766.2155 • (fax) 907.766.3373

June 25, 2013

Pat Kemp, Commissioner
Alaska Department of Transportation
PO Box 112506
Juneau, AK 99811

Re: Herbicide and Pesticide use in the Haines Borough

The Alaska Department of Environmental Conservation's decision earlier this year to eliminate the public review process and permitting requirements for using chemicals on state lands deeply concerns the Haines Borough. At a minimum, the Haines Borough requests that DEC reinstate a public review process, including right of appeal, for the potential use of herbicides and pesticides within the borough.

Most of the Haines Borough roadways lie adjacent to, or cross anadromous streams and salmon habitat. The Haines Highway passes through the world class Alaska Chilkat Bald Eagle Preserve, home to the largest gathering of Bald Eagles. Spraying herbicides and pesticides has the potential to harm the environment, fish, wildlife, and human health. Healthy salmon returns for commercial, sport and subsistence fisheries provide major economic benefit to Southeast Alaskans. There is a wealth of scientific literature that links pesticide and herbicide contamination with salmon mortality as well as non-lethal impacts that result in lowered survival rates. Many salmon spawn in waterways adjacent to Haines' roadways. The commercial value of the Lynn Canal salmon fishery ranges from \$1 million to \$3.4 million annually.

Pesticide and herbicide use near residences and areas that our citizens use for gathering food, medicinal substances, or craft materials is inherently dangerous. Use within watersheds that provide drinking water for communities or individuals also poses serious threats. Pesticides and herbicides contain toxic chemicals which rapidly disperse in our local rainforest environment. They have been linked with numerous environmentally caused cancers and may have additional detrimental effects that are presently unknown.

Article 10 of the State Constitution clearly provides broad powers to local governments. **Home Rule** local governments enjoy even broader powers. Article 10, Section 11 of



June 17, 2013

Commissioner Patrick J. Kemp,
Department of Transportation & Public Facilities
PO Box 112500
3132 Channel Drive
Juneau, Alaska 99811-2500

Re: Herbicide and Pesticide applications in the Petersburg Borough

Dear Commissioner Kemp;

The Petersburg Borough has learned that earlier this spring, regulations were adopted that would allow state agencies to apply herbicides and pesticides on state property and rights of way without obtaining a permit from the Department of Environmental Conservation and without public review. The Petersburg Borough is very concerned that this action denies our citizens the right to participate in the decision-making process and jeopardizes our community. The broad application of herbicides and pesticides can and does affect drinking water, aquatic habitat, and impacts traditional food gathering areas. In addition, this process exposes our children and pets to harmful, possibly carcinogenic, toxins.

These regulations were adopted despite widespread public opposition across the state. The people of Alaska collectively own our public water supply, our fish and our wildlife resources. We strongly feel that we should have a voice regarding if and when there are any plans which might negatively impact those resources within our area. The 30-day notification requirement prior to application that was adopted, allows for no public input. This falls way short of providing our citizens a voice.

Alaska markets our wild salmon to the world by touting our pristine waters. Applying toxic chemicals to the upland habitat would certainly make that a questionable claim. Spraying our uplands could negatively impact productivity of local salmon streams. Even the small tributaries are important fish rearing habitat. Also, many out-the-road residents rely on surface run-off and small streams for their drinking water. Many of our residents gather berries, fiddlehead ferns, and other traditional foods along roadways in our area. If herbicides and pesticides are applied, there is simply no way to protect against contamination. This is particularly true in our island rain forest ecosystem where anything applied to the land is rapidly washed into adjacent waterways and eventually into salt water by the rain.

You may recall that several years ago the Department of Transportation announced plans to spray herbicides to control plant growth along Mitkof Highway. The people of

Borough Administration
PO Box 329, Petersburg, AK 99833 – Phone (907) 772-4519 Fax (907) 772-3759
www.ci.petersburg.ak.us

Petersburg expressed strong opposition and that program was stopped before it got started. Some were opposed to the visual impact, but most were more concerned that toxic residue would contaminate residential runoff-based water supplies and run into aquatic habitats and impact fish productivity. Those concerns have not changed. ADOT went back to mowing the roadsides and, although that method is more labor intensive, it has kept the vegetation down and kept toxic chemicals out of the island's water supplies and waterways.

Article 10 of the State Constitution clearly provides broad powers to local governments. **Home Rule** local governments enjoy even broader powers. Article 10, Section 11 of Alaska's Constitution provides that: "A home rule borough or city may exercise all legislative powers not prohibited by law or by charter. Adoption of a Home Rule charter promotes maximum local self-government to the greatest extent possible."


Given that language in the constitution, it certainly seems that the Borough, not the state, should be making the decision on whether or not it is important to protect our primary industry and protect the residents of the borough from toxic contamination. We feel strongly the large-scale application of herbicides and pesticides should not be allowed within our Borough. This is the best way to protect our citizens and the waterways of our community.

The Borough hopes that it does not have to consider the adoption of an ordinance and land use restrictions that will ban the large-scale application of herbicides and pesticides within Borough boundaries. At the very least any plans to apply herbicides or pesticides should require a public review process and approval by the Assembly before application could occur.

We would appreciate your immediate attention to this issue.

Sincerely,

Susan Flint
Vice Mayor



Distribution

KFSK Radio
Petersburg Pilot
Senator Dennis Egan (email)
Representative Beth Kerttula (email)