

Petersburg Vessel Owners Association

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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

certified airports, accessible non-certified airports, and facilities in compliance with their EPA approved labels. "...Aquamaster...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." While the EPA considers herbicides containing Glyphosate minimally toxic to humans and safe for use in aquatic environments, a peer-reviewed study published in the April, 2013 edition of the scientific journal *Entropy*¹ presents data and results disputing EPA's assertions of low toxicity and safety. As stated in the Abstract, Discussion and Conclusions sections:

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."

Discussion: "Contrary to the current widely-held misconception that glyphosate is relatively harmless to humans, the available evidence shows that glyphosate may rather be the most important factor in the development of multiple chronic diseases and conditions that have become prevalent in Westernized societies."

Conclusions: "Glyphosate is likely to be pervasive in our food supply, and, contrary to being essentially nontoxic, it may in fact be the most biologically disruptive chemical in our environment."

This peer-reviewed study casts a disturbing light on the use of any herbicides in or near aquatic environments. The study not only underscores our concerns about the IVMP's use of herbicides in or near aquatic environments but also provides specific justification for the suspension of that plan.

This study has been widely disseminated to the public by a variety of news media, particularly web-based media. As such, the public's awareness and perception of the use of these herbicides in or near Alaska's pristine waters could likely have a negative impact on the public's willingness to buy and consume Alaska seafood. Also, the presence of known toxins in Alaska seafood products could also have a major impact on the global marketing and distribution of those products.

In conclusion, we urge you to reassess the current chemical control provisions in the IVMP and eliminate the broad-based spraying of herbicides and pesticides as part of the IVMP.

Thank you for your time and attention to this important matter.

Sincerely,

Brian Lynch

Brian Lynch
Executive Director

CC: Gov. Sean Parnell, Sen. Dennis Egan, Sen. Bert Stedman, Rep. Beth Kerttula, Rep. Cathy Munoz, Rep. Jonathan Kreiss-Tomkins, Rep. Peggy Wilson, Stefanie Moreland, ADF&G Commissioner Cora Campbell

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.

ALASKA STATE LEGISLATURE

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State Capitol
Juneau, Alaska 99801
(907) 465-6600
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Mike Dunleavy
Senator

May 9, 2013

Mr. Clark Hopp
Vice President, Engineering
Alaska Railroad Corp.
PO Box 107500
Anchorage, AK 99501

via: email

Dear Mr. Hopp:

I have recently become aware of serious concern with the Alaska Railroad's upcoming plan to spray herbicides on the track in the Talkeetna area. While I understand the need and requirement for the Alaska Railroad Corporation (ARRC) to control vegetation along your tracks, and I acknowledge that your plan appears to comply with the State regulations governing these activities, I write to urge you to do everything in your power to conduct this project in a manner respectful of the local residents and sensitive to the environment.

To that end, I ask that you carefully review the letters directed to you on this issue from the Talkeetna Community Council, and other concerned area citizens, and to do all you can to accommodate their requests. While I recognize the track area itself may not be classified as a public area, the ARRC should take into consideration the community's concerns by not spraying herbicides on public areas within the Alaska Railroad Right-of-Way. (Those areas include: parts of the Chase trail that lay within the spraying area; any areas where the Chase Trail crosses the Alaska Railroad tracks; downtown Talkeetna; the Talkeetna Depot, and the area adjacent to the bridge over the Talkeetna River.)

Of particular concern is Talkeetna's public water source and other water sources used by local residents in the adjacent areas. I suggest the Alaska Railroad continue to work with community members to identify individual home-site drinking water sources and flag stops used by community residents to provide an adequate set back from those areas. The Alaska Railroad must maintain an adequate distance from these water sources to ensure herbicides do not enter the community's drinking water. Additionally, I strongly urge the ARRC to employ all available means and diligence in order to ensure that the chemicals used in your operation do not compromise any area waters; either through direct application, drift or migration.

To better understand this issue generally, I would appreciate some historic information as to why the Alaska Railroad uses herbicides, what other options have been used in the past or have been explored as alternatives to herbicide treatment, and what if any emerging technology could be considered in lieu of herbicide application. While I understand the

necessity of vegetation control, I believe it is incumbent upon the ARRC to continue to look for the best possible way to accomplish this sort of task.

Thank you for your immediate and continued attention to this important matter. I look forward to a report on how the concerns outlined above were addressed and the additional information I requested at your earliest convenience. Additionally, I ask that you provide a copy of your reply to me to the Talkeetna Area Community Council so they may also have that information. Should you need clarification on this issue or additional information from my office, please feel free to contact either myself or Brett Huber, my Chief of Staff, at 907.376.3370.

Sincerely,

Senator Mike Dunleavy
Senate District D

cc: Tim Sullivan, Manager External Affairs, ARRC
Whitney Wolff, Talkeetna Community Council, Inc.
Mr. John Strassenburgh
Ms. Beck Long

MD:bwh



Talkeetna Community Council, Inc.

A non-profit, community service organization

Alaska Railroad
Stephanie Wheeler - Corporate Comm. Officer
Clark Hopp - Vice President of Engineering

May 7, 2013

The Talkeetna Community Council Inc. met last night for it's regular monthly meeting where we responded to numerous citizen concerns regarding the ARR's upcoming plan to apply herbicides to the rail in our area . According to a notice posted on the ARR web site, and Tom Brooks who was present at the meeting, this spraying is poised to commerce next week.

1.) TTCI REQUESTS ARR SUSPEND SPRAYING FROM MP 225 TO MP 232 (Craver's Right of Way Farm to the end of the Chase Trail)

These miles of track pass through or within close proximity to: a farm, a playground, an ARR depot with tourists, a camper park, a restaurant, an active heli pad, a crossing frequented by bicyclists, a Princess bus loading area, the National Park Service residence, Talkeetna's public water source, and the Chase Trail used recreationally.

The herbicide Oust Extra has specifically stated on it's label that it is not to be applied in recreational areas. The section of track noted above is used recreationally. Tom Brooks has confirmed that application of the herbicide will follow guidelines on the label.

2.) NOTIFICATION OF SPRAYING - TTCI requests that the ARR actively contact residents of the Chase area to identify flagstop mile posts and drinking water sources within 200 feet of the tracks for suspension of spraying. No spraying should be conducted within 200 feet of a flagstop, drinking water source, or water body.

Local residents have taken the initiative to put PSA's (public service announcements) on our local KTNA radio to alert flagstop users that they can submit locations to ARR. Residents of the Chase area do not have access to newspapers - especially during break up. TTCI has reviewed the notice on the ARR site and finds it inadequate. It

Talkeetna Community Council, Inc.
P.O. Box 608, Talkeetna AK 99676

does not alert residents that they can submit a flagstop location or drinking water source to request that no spraying occur within 200 feet of those locations.

TCCI also requests a hard copy notice of spraying be posted at the crossing at ARR MP 232. Notification must contain SPECIFIC DATES of spraying so trail users can be out of the vicinity and avoid dangerous contact.

3.) TCCI REQUESTS A DETAILED PLAN AND PROCEDURES FOR IDENTIFYING WATER BODIES, FLAGSTOPS AND AREAS OF SUSPENDED SPRAYING.

TCCI is alarmed that the ARR does not appear to have a plan for how water bodies and flagstops will be identified and omitted from spraying. Tom Brooks was asked what system is in place for this critical safety measure required in the IVMP - he was specifically asked if the blue and white color coded tie marking system from the 2010 Seward to Indian application would be used in 2013 - he was clear that it would not. He stated vaguely that a GPS system would be used but provided no details of the procedures.

The impending spraying will occur in the next weeks - it is imperative the affected communities have detailed information about the safety and no spray buffer plan. Stephanie Wheeler states in a letter to Talkeetna resident Becky Long "ARR will use appropriate methods such as a pilot car and setbacks" to protect water.

TCCI adamantly requests a pilot car be required during ALL herbicide application and specifically from Sunshine through the Hurricane Turn route. It is common knowledge that this stretch of track is both residential and used recreationally. It is in close proximity to the Susitna and Indian Rivers, and is actively advertised by the ARR as a tourism destination. (Gold Creek area will also host several work camps this season for Susitna Watana studies - one of which is adjacent to the rail and bridge)

TCCI has consistently been opposed to the ARR use of herbicides. It is a hazard to humans, fish, wildlife and all aspects of the ecosystem. The systematic removal of the DEC public process concerning herbicide application allows for no oversight or participation from those who will be adversely affected.

We look forward to a timely response to our requests.
Sincerely,

Whitney Wolff
Talkeetna Community Council, Inc.

***Talkeetna Community Council, Inc.
P.O. Box 608, Talkeetna AK 99676***



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 Mlikof 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."

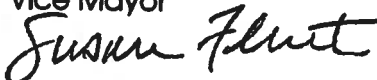
Given that language in the constitution, it certainly seems that the Borough, not the state, should be making the decision on whether or not it is important to protect our primary industry and protect the residents of the borough from toxic contamination. We feel strongly the large-scale application 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)



Municipality of Skagway

GATEWAY TO THE KLONDIKE

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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.

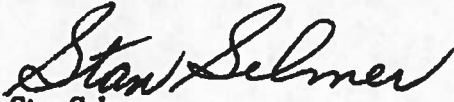
State Street runs through the middle of the Skagway townsite, with residential homes and local businesses bordering it along its entire length. The Dyea Road provides access not only to more residential areas, but also to remote, natural recreational areas that are highly valued by locals. The airport 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, appearing to read "Stan Selmer". The signature is fluid and cursive, with the first name "Stan" and last name "Selmer" clearly distinguishable.

Stan Selmer
Borough Mayor



HAINES BOROUGH, ALASKA

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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

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."

In the past, the community of Haines has opposed the spraying of toxic herbicides or pesticides along borough roadways and on public lands. The Haines Borough continues to strongly oppose the use of herbicides and pesticides on roadways and public lands in the borough.

Protecting our residents and the environment from potential damage caused by using toxic chemicals along roadways in the Chilkat and Chilkoot watersheds and within the Alaska Chilkat Bald Eagle Preserve are of utmost importance to the Haines Borough.

Thank you for your consideration of this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Stephanie Scott".

Stephanie Scott

Mayor, Haines Borough

**Cc: Senator Bert Stedman
Representative Jonathan Kreiss-Tomkins
Representative Les Gara
Al Clough, Assistant Commissioner
Matt Boron, DOT, Haines**

CITY AND BOROUGH OF WRANGELL

RESOLUTION NO. 11-13-1286

A RESOLUTION OF THE ASSEMBLY OF THE CITY AND BOROUGH OF WRANGELL, ALASKA, REQUESTING THAT THE REGULATIONS COVERING THE USE OF HERBICIDES ALONG ALASKA ROADWAYS BE AMENDED TO PROVIDE FOR PUBLIC COMMENT, AND REQUESTING THAT THE ALASKA DEPARTMENT OF TRANSPORTATION AND THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION MEET WITH REPRESENTATIVES FROM SOUTHEAST COMMUNITIES TO DISCUSS THE IMPACTS OF THE USE OF HERBICIDES ALONG THE REGION'S ROADWAYS

WHEREAS, the use of herbicides by the Alaska Department of Transportation along Alaska's roads and highways is a subject of great concern amongst the residents of Wrangell, Alaska; and

WHEREAS, the use of herbicides and pesticides should only be used when mechanical and/or manual methods cannot be used; and

WHEREAS, public and private lands and waterways adjacent to Alaska's roadways provide access to fish, wildlife, berries and many other naturally occurring resources that provide food, economic, lifestyle and cultural benefits to many Alaskans; and

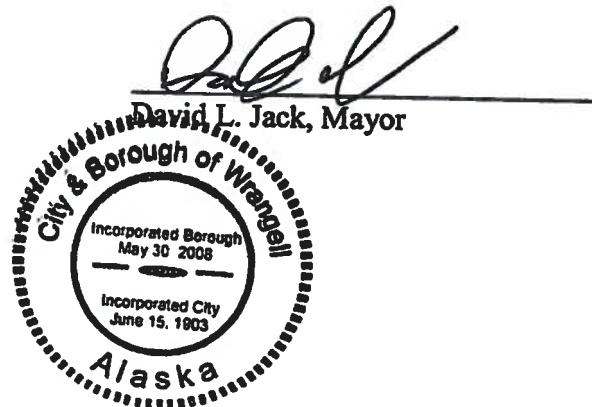
WHEREAS, Regulations developed by the Alaska Department of Environmental Conversation and the Alaska Department of Transportation do not provide for public comment on the use of herbicides along Alaska's roadways and public lands

NOW, THEREFORE, BE IT RESOLVED that the City and Borough of Wrangell, Alaska, requests that the regulations covering the use of herbicides along Alaska roadways be amended to provide for public comment

BE IT FURTHER RESOLVED, that the City and Borough of Wrangell, Alaska, requests that the Alaska Department of Transportation and the Alaska Department of Environmental Conservation meet with representatives from Southeast communities to discuss the impacts of the use of herbicides along the region's roadways.

ADOPTED: November 12, 2013

ATTEST: Kim Lane
Kim Lane, Borough Clerk



PO Box 766
Talkeetna, AK 99676
July 31, 2012

Rebecca Colvin
Division of Environmental Health
Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, AK 99501

Via email: Rebecca.colvin@alaska.gov

To whom it may concern:

These are my comments on the proposed regulation changes in Title 18 of the Alaska Administrative Code, Chapter 90 dealing with Pesticide Control Regulations, according to the public notice of May 21, 2012.

These proposed changes are ill-conceived and would have the effect of facilitating rather than controlling terrestrial pesticide use¹ by state agencies on state lands and rights of way. These proposed changes represent an abdication of the Alaska Department of Environmental Conservation's ("ADEC") duty to protect human health and the environment and are inconsistent with the purpose of Chapter 90 of Alaska Administrative Code which is "to protect human health, safety, and welfare, animals, and the environment by ensuring the proper use, sale, distribution, transportation, storage, and disposal of pesticides and their containers."

I oppose these proposed regulatory changes, and recommend that they be permanently withdrawn and discarded.

Note that, unless otherwise stated, I am addressing throughout my comments the application of pesticides by a state agency to state lands and rights of way, excluding aquatic and aerial applications and the spraying of private property. I refer herein to a state agency considering or proposing the use of pesticides on state lands and rights of way as an "applicator agency."

Function and Importance of the Current Permitting Process

The current pesticide use permitting process requires that an applicator agency proposing to apply pesticides on state lands or rights of way (including railroad and road rights of way) must first obtain a permit from ADEC, whereby ADEC authorizes the applicator agency to

¹ By terrestrial pesticide use, I mean that the pesticide application program or project is not an aquatic application and is not an aerial application.

proceed with the spray program or project. A spray operation cannot proceed without such authorization. The current permitting process requires that an applicator agency prepare and submit an application, including accompanying data and additional data if requested by ADEC. The application must include such information as identification/description of water bodies, identification of public and private drinking water sources, pesticide formulation, when the spraying would occur, location, soil drainage characteristics, and other items as stipulated in 18 AAC 90.515.

In addition, the permitting process provides for meaningful public and agency participation in the decision making process. The structure of the process also facilitates consultation with other agencies as well as the gathering of information from outside sources (e.g., sister governmental agencies outside of Alaska).

ADEC may approve or deny a pesticide permit application, or approve an application with conditions that the applicant must adhere to. It may also revoke or modify a permit that it previously issued.

This permitting process is crucial in providing for the public health and protecting the environment, especially with respect to the waters of the state and public and private drinking water systems. It also allows the public a say in how its lands are used and helps prevent persons from being unknowingly or involuntarily exposed to these harmful chemicals.

The existing permitting process is a crucial because:

1. It requires an applicator agency to take a hard look at and document what they are doing and what they propose to do with respect to "pest" control and what role, if any, pesticides would play in the management of that pest. The applicator agency is held accountable because both the public and ADEC review and consider the data and information supplied in the application.
2. It informs the public in advance of a proposed pesticide program or project so that it is able to participate meaningfully in the decision of whether or not to use pesticides and, if approved, what conditions should be placed on the pesticide use.
3. It provides ADEC, the state agency possessing the practical and technical knowledge of proper and appropriate handling and use of pesticides, with the information and data necessary for it (after consideration of public comment) to make an informed decision on whether the proposed pesticide project would result in an unreasonable adverse effect.

4. It provides ADEC with a body of information, including the treatment results, of specific pesticide projects, which is essential in order to maintain the data necessary for it to properly monitor and control the use of pesticides.²

This permitting process, under the proposed new regulations, would be eliminated, taking virtually all of these public benefits with it.

The 2006 Alaska Railroad application to spray pesticides

On June 13, 2006, the Alaska Railroad ("ARRC") applied to ADEC for a permit to spray pesticides along its mainline track between Seward and Fairbanks and on its rail yards.³ This permit application provides a telling example of the public process and ADEC's analysis, which resulted in significant public benefit; all of which would be lost under the proposed new regulations.

The 2007 Decision Document⁴ represents ADEC's grounds for denying the railroad's June 2006 pesticide permit application. This Document demonstrates how the permitting process works when fully engaged: the meaningful public participation process, ADEC's consultation with other agencies (state and federal), ADEC's outside consultation with sister agencies in Canada, the United Kingdom, and Norway, and, most important, ADEC's concern about protecting the waters of the state from contamination by pesticide chemicals.

The mechanism that facilitates this kind of in-depth analysis and public engagement would be eliminated under these new regulations (for spray projects by state agencies to state lands and rights of way, with the exception of aerial and aquatic applications).

The 2007 Decision Document concludes, among other things, that "The ARRC has not adequately identified all the water resources in and near the proposed spray area;" "Concerns raised during the public comment period and during inter-agency coordination with the Alaska Department of Natural Resources (DNR), Alaska Department of Fish and Game (ADF&G), and the National Park Service regarding the possibility of pollution of water resources are compelling;" "Based on the fact that the labels prohibit the application of these herbicides to water, the proposed application may result in unreasonable adverse effect to human health, animals, or the environment;" and "The proposed 10-foot spray

² The current information requirements serve an important and necessary purpose in managing pesticide use on state lands and rights of way. The proposed new regulation .640 is an utterly inadequate and virtually meaningless substitute, as explained herein and particularly in my comments below for .640 under section entitled: Detail comments on each stipulation of the proposed regulations

³ Department of Environmental Conservation, Division of Environmental Health, Alaska Railroad Corporation Permit Application for Pesticide Use for Vegetation Management on Railways and Rail Yards, Decision Document, February 2007 ("2007 Decision Document").

⁴ I am attaching the 2007 Decision Document as part of my comments to be included in the record.

buffer zone around water resources proposed by the ARRC is inadequate to protect against water pollution by the herbicides" (see 2007 Decision Document, page 1).

The 2007 Decision Document, at page 4, goes on to state: "Due to the discrepancy in the data sets submitted to DEC and the large number of water bodies located throughout the rail line, any spray method, no matter how precautionous, would likely result in the proposed herbicides reaching the waters of the state." And on pages 4-5: "In the permit application, the ARRC proposed to utilize a 10 foot no-spray buffer around water features. Research indicates this buffer zone is inadequate to protect against water pollution by the herbicides."

ADEC denied the application under the authority of 18 AAC 90.525(b)(5), stating: " 'the department will, in its discretion, deny a permit if the department finds that there is an unreasonable adverse effect' that would result from the pesticide application."

ADEC's analysis, evaluation, and decision on the railroad's 2006 pesticide permit application showed that ADEC viewed risk of a pesticide formulation to human health and the environment according to its toxicity, persistence in the environment, and migration characteristics. ADEC also listened and responded to concerns expressed by the public in arriving at its decision to deny the application. ADEC also took seriously the importance of protecting the waters of the state.

For these reasons, ADEC found it necessary, in order to protect water resources, to override both the EPA label (which did not stipulate or recommend establishing no-spray buffers around water bodies) and the applicator agency's best judgment (i.e., ADEC found inadequate the railroad's proposed 10 foot buffers around water bodies).

It is quite stunning in light of this past history, that ADEC is now, with its proposed regulations, trying to scrap this important and necessary process for controlling pesticide use and protecting human health and the environment. ADEC would be getting out of the way of pesticide use, instead of controlling it.

Under its proposed regulations, ADEC would be relying on the applicator agency to comply with pesticide laws and regulations and with the EPA label in order to protect human health and the environment, and to avoid unreasonable adverse effect resulting from the use of pesticides. An applicator agency is ill-equipped to carry out this crucial public and environmental health function. **Such reliance on the applicator agency and on the EPA label, as demonstrated in the above example,⁵ has proved unreliable, and insufficient to protect human health and the environment.**

⁵And also below under: The proposed regulatory changes fail to consider the risk to human health and environmental of different pesticide formulations

In short, the proposed new regulations would leave the ADEC with no mechanism by which to make the determination as to whether a program or project involving the use of pesticides would have an unreasonable adverse effect.

Why ADEC is proposing these changes and why the reasons are spurious

ADEC, according to public statements, is proposing these regulatory changes for two reasons. First to be consistent with other land-owners such as farmers and native corporations, neither of which are required to obtain a permit for pesticide use.

In pursuing "consistency" ADEC fails to consider that state lands are public lands. The public owns them and the public uses them. In many cases, especially along state rights of way, the public must use state lands and rights of way to get where they need to go, which means that folks would potentially be involuntarily exposed to toxic and harmful chemicals. This is very much unlike private property. The public doesn't need to cross a farmer's fields to get to where they need to go.

Furthermore, state lands and rights of way are owned by the public, and the public has a legitimate interest in its lands and has a fundamental right to meaningfully participate in the decisions about how its lands are used.

The public also has a fundamental right to meaningfully participate in agency decisions that affect it. By this I mean, for example, if a person owns property that abuts state land or right of way that may be sprayed with pesticides, that person has a right to be heard and participate in the decision. It is not legitimate for ADEC (or any government body) to take away a person's right to protect the health and safety of himself or herself or their family or property.

These proposed regulations, with no mechanism to establish buffers or no-spray zones, would allow spraying right up to a person's property line. Considering the high probability of drift during application, migration, and post-application winds blowing contaminated dust/plant debris, it is a near certainty that the adjoining private properties would be affected. This means vegetable gardens, the children's sandbox and swing set, etc. would be contaminated, and, of course the family who lives there would be exposed. All with no provision for that person, or the general public, to be heard in advance of the spraying.

People and their children would be involuntarily and sometimes unknowingly, exposed to these toxic chemicals, and they would have no say whatsoever. I am outraged, and I think that folks, if they were aware of what ADEC is up to, would be equally outraged.

If ADEC wants to pursue a goal of consistency, it can (and there is a strong argument to do so) require native corporations and farmers, and any large user of pesticides to go through the existing permitting process. That would surely improve ADEC's capacity to protect

human health and the environment. But, unfortunately, ADEC is heading, with the proposed regulations, in the exact opposite direction, which would be to facilitate rather than control pesticide use, and in the process to prevent folks from exercising their fundamental rights as citizens.

The second reason for getting rid of permit requirements is to free up ADEC staff time, which is presumably considered internally to be excessive.⁶ ADEC's Karin Hendrickson indicated that time saved by eliminating the permit process could be spent on things like education in safe use of pesticides, outreach, inspections, and possibly water monitoring.⁷

These are all things that ADEC should be doing, and to large extent is doing,⁸ ADEC could probably do more, but it should never be at the expense of the existing permitting system.

In addition, there is much interaction between a prospective permittee and ADEC. Things like education, monitoring, and outreach are integral to the existing permitting process. So, throwing out the permitting system would also be throwing out a certain amount of education, outreach, and inspections.

Even so, education, inspections, and outreach and the permitting system are not mutually exclusive... all can co-exist; ADEC can, and should, do all. ADEC should keep the current permitting system, and it should expand its education program in safe pesticide use and it should be monitoring and enforcing, and it should be collecting data on the use and effects of pesticide use. That is ADEC's job.

The use and handling of pesticides is a significant public and environmental health issue, and ADEC's efforts should not be cut short in any way. ADEC is remiss in not doing all it can to protect human health and the environment, including seeking funding if necessary.

ADEC's reasons for pursuing the change range from spurious to specious to disingenuous. It is evident that the perceived benefit to ADEC would be very small when compared to the significant harm to public health and the environment that would result if the proposed changes are adopted.

The proposed regulatory changes fail to consider the risk to human health and the environment of different pesticide formulations

Another reason the proposed regulations are bad public policy, and represent a high risk of resulting in unreasonable adverse effect to human health and the environment has to do

⁶ see email from Ernst Prax, staff to Representative Wes Keller, to a concerned member of the public, dated July 24, 2012 (attached)

⁷ KTNA radio, Susitna Valley Voice, July 11, 2012 and KTNA news report June 21, 2012

⁸ see, for example, ADEC website, Division of Environmental Health, Pesticide Control Program for educational flyers and other information, <http://www.dec.alaska.gov/eh/pest/factsheets.htm>

with the fact that there are many different pesticides and pesticide formulations registered in Alaska, and that these chemical formulations vary according to level of toxicity, persistence in soils, and migration characteristics. This means that the risk to human health and the environment varies among the various pesticides and pesticide formulations. The new regulations do not consider the varying levels of risk to human health and the environment represented by the various pesticide formulations.

For example, with respect to the railroad's 2006 application, ADEC currently lists a pesticide called Riverdale Solution Water Soluble IVM ("SWS") (EPA Reg No. 228-260) on its list of registered pesticides. SWS is a product that the Alaska Railroad proposed using as part of its pesticide formulation in 2006 when it applied to ADEC to spray pesticides along its mainline track between Seward and Fairbanks. The only active ingredient of SWS is 2,4-D. SWS is not classified as "restricted use" at either the state or federal level.⁹ ADEC's website back in 2006 described 2,4-D compound as a highly toxic pesticide and that "a taste to a teaspoon taken by mouth could kill an average sized adult."¹⁰ 2,4-D represents 50% of the defoliant component of Agent Orange,¹¹ the notorious defoliant used in Vietnam that sickened so many people.

There is a significant difference between the formulation that used SWS (2,4-D) and the pesticide product called Aquamaster, which is the pesticide the ARRC is currently spraying along portions of its right of way under ADEC-approved permits. Aquamaster, although a pesticide, is much less toxic than SWS. These two products would be treated no differently under ADEC's proposed regimen. The proposed regimen considers the risk of these two products to human health and the environment to be exactly the same. In both cases, ADEC would be relying only on the applicator agency to comply with the pesticide laws and regulations and with the EPA label.

The proposed regulations, by eliminating the permit system for terrestrial spraying on state lands and rights of way by state agencies, also eliminate the vehicle for considering such things as the toxicity, persistence, or migration and other characteristics of a pesticide as well as the circumstances (e.g., location, presence of water bodies, topography) of its application when determining risk to human health and the environment or deciding whether or not to use a pesticide. In fact, with these proposed regulations, there is no analysis of risk and there is no decision. Pesticide use is pre-approved, and left to the applicator agency.

Compliance with the EPA label is not sufficient to protect human health and the environment

⁹ There are special rules for "restricted use" pesticides, but since SWS is not "restricted" these do not apply to SWS.

¹⁰ <http://www.dec.state.ak.us/eh/pest/Product.asp?PID=1669095> This link was working in 2006; it came up with an error message when I tried it recently.

¹¹ citizen testimony, ADEC public hearings, Talkeetna, July 19, 2006, from audio tape recording.

ADEC maintains, as Karin Hendrickson did on KTNA radio, that "If pesticides are used in accordance with the label, then there should not be problems."¹² This statement is directly contradicted by ADEC's actions on the Alaska railroad's pesticide permit applications of 2006, 2009, and 2012.

ADEC denied the 2006 application, as described above; ADEC approved the 2009 application and required 100 foot buffers around water bodies; and ADEC approved the 2012 applications and required 25 foot buffers around water bodies. **In all cases ADEC either denied the permit application or imposed greater restrictions on the spray operation than was required by the label.**

ADEC's denial of the 2006 application and approval of the 2009 and 2012 applications shows that ADEC recognizes that the risk to human health and the environment varies among different pesticide formulations; that some formulations are more toxic than others. The fact that ADEC, in all three instances, overrode the EPA label demonstrates that reliance on the label is not sufficient to account for the varying risk to human health and the environment represented by the various pesticide formulations. ADEC has shown in all three of these instances that compliance with the label is not sufficient to protect human health and the environment.

Given ADEC's past actions, it is inexplicable that ADEC in proposing these regulatory changes would rely on the label to account for risk. It knows that some pesticides are more toxic or otherwise riskier than others, and a pesticide doesn't have to be on the restricted use list to be very harmful. And yet, ADEC's view of risk, as represented by these proposed regulatory changes, addresses only the way a pesticide is applied rather than its toxicity. If it is an aerial application or if the pesticide is to be applied directly to water a permit is required; otherwise, a permit is not required.¹³ But the toxicity, persistence, or migratory (to water for example) characteristics of a formulation do not enter into ADEC's proposed view of risk.

The effect, should these regulations be adopted, could be, for example, that the Alaska Railroad would switch from the current approved Aquamaster to the 2006 formulation, containing SWS and 2,4-D. The SWS label (which would be relied upon under the proposed regulation) contains no recommended or required buffer. Under the proposed regulations, the ARRC could change its pesticide formulation with no review or approval required by ADEC, no public process, no identification of water bodies, and no buffers around water bodies. The railroad could just do it. The only requirements would be to notify the public that it is going to spray¹⁴ and comply with the (insufficient) label.

¹² KTNA Susitna Valley Voice, July 11, 2012 (second segment at about 5 minutes).

¹³ There is a minor exception to this, which is, a permit is required if a state agency wishes to apply pesticides to private land.

¹⁴ See below under specific comments for reasons why the notification requirements of the proposed regulations are inadequate.

With these proposed regulations, it would be the pesticide user's choice, without the public's or ADEC's involvement.

ADEC is abdicating its fundamental duty

The proposed regulatory changes represent an abdication of the ADEC's fundamental duty to protect human health and the environment and are inconsistent with the purpose of chapter 90 which is "to protect human health, safety, and welfare, animals, and the environment by ensuring the proper use, sale, distribution, transportation, storage, and disposal of pesticides and their containers."

Under the current permitting system, ADEC has both the authority and the responsibility to control terrestrial pesticide use by state agencies on state lands and rights of way. Under the proposed regulations, there would be no permitting process, and applicator agencies would not be required to obtain approval from ADEC in order to spray pesticides (as long as it is not an aerial or aquatic application). Not only do these proposed regulations empower an applicator agency to pursue a pesticide spray operation on its own authority, but it cuts the public entirely out of the process.

ADEC is relinquishing its authority by abolishing the permit system,¹⁵ and by taking an almost total hands off approach to the use of pesticides by state agencies on state lands and rights of way. The proposed regulations, for example, do not contain any requirement (or provide any mechanism to ensure) that ADEC

- review, evaluate, monitor, or control an applicator agency's pesticide spray operation;
- evaluate a proposal to use pesticides to determine if the spray operation would have an unreasonable adverse effect;
- review, evaluate, or approve an IPM;
- monitor or otherwise test for an applicator agency's compliance with an IPM or with the EPA label;
- obtain the information necessary to ensure protection of Alaska's water resources (e.g., no requirement or mechanism to identify water bodies or private drinking water systems or sources within or in close proximity to water bodies);
- determine the need for or impose no-spray buffers around water bodies; and
- provide for public participation in pesticide use decisions.

ADEC requires that it be notified 15 days in advance of commencement of a spray operation. The proposed regulations are silent on the nature, content, and form of the notification (e.g., would a quick phone call... "this is the Alaska Railroad, we are going to spray pesticides in 15 days, good bye" ... suffice?). Even if there was guidance on the nature, content, and

¹⁵ For non-aerial, not aquatic applications by state agencies on state lands

form of the notice, 15 days provides insufficient time for ADEC to research and understand the spray operation enough to justify a "stop" order if warranted.

ADEC may retain the responsibility to control pesticide use, but it is proposing to so gut the regulations that it would be impossible or impractical for ADEC to meaningfully exercise its authority to fulfill that responsibility. Pesticide use is a significant public health issue, and ADEC, with these proposed regulations, has decided, instead of protecting public health and the environment, to step aside, and get out of the way.

ADEC obscures from the public the true nature of the proposed regulatory changes

ADEC has provided on its website several documents that contain information about the proposed regulatory change. These documents are the primary source of information available to the public regarding the proposed changes. The substantive documents are the Proposed Regulation Change Fact Sheet, the Public Notice, and the Regulation Amendments.

The language of these documents is carefully crafted. None of the documents straightforwardly or clearly inform the public of the true nature of the change, the essence of which is that the current permitting process for the application of pesticides by state agencies on state lands and rights of way (with the exception of aerial and aquatic applications) would be abolished. And along with the elimination of the permit requirement, things like public participation and process and the identification of water bodies and drinking water sources and protection thereof would also be eliminated.

The documents dance around the subject of permit... throwing out the term "permit-by-rule" on the Fact Sheet, with no way for the public (even by calling ADEC as I did) to find out what that means. "Permit-by-rule" may be a red herring, but we don't really know.

The Regulation Amendments document does not provide a before and after red-lined version that would clearly show the wording of the regulation as it exists now, the changes, and the proposed version. A person would have to locate the current version of Chapter 90 to get the full picture, and it is not so easy to find a version of Chapter 90 that you know is current.

And, the Public Notice discusses permits, but the first word in the sentence that mentions permits is "Clarifying" The word "clarifying" means to "make intelligible, to free from ambiguity." It doesn't mean "get rid of" or "eliminate."

ADEC is deceiving the public by withholding or obscuring essential information about these proposed regulatory changes. ADEC has not reasonably informed the public as to the nature and scope of these proposed changes. The public process is therefore not legitimate.

Public Comment Deadline Extension

ADEC is putting these proposed changes out for public comment for 72 days, but it is doing so in the heart of summer recreational and business activity, which occupies most folks this time of year. The fact that folks are pre-occupied during the summer months means that 72 days isn't enough. These proposed changes are drastic, and the public is being removed from the process. ADEC must be aware that if folks were clearly informed of the content and implications of the proposed changes they would loudly object.

ADEC has received a number of requests, some from state legislators, to extend the comment period until things settle down from the hustle and bustle of summer. ADEC has chosen to deny those requests.

I see a certain irony in this. These rule changes are out for public comment at a time when folks are out trying to catch salmon in their favorite stream, completely unaware of the possibility that by this time next year their stream may be contaminated by pesticides (potentially including 2,4-D) sprayed to the water's edge and seeping or blowing into the water itself.

ADEC's lack and mischaracterization of information coupled with ADEC's refusal to extend the comment period to a time when folks can focus on something other than enjoying summer or running a business at the busiest time of year, means that the public is being deprived of its right to meaningfully be heard on the proposed changes.

Detail comments on each stipulation of the proposed regulations

These are my detail comments on each stipulation of the proposed new regulations. The regulation language¹⁶ is in italics; my comments are in normal text, bold, and indented.

Below I describe deficiencies in the proposed new regulations. These deficiencies support the above conclusion that these proposed regulations represent an dereliction of ADEC's duty to protect human health and the environment and to engage the public in meaningful participation. These deficiencies also show that ADEC has drafted these proposed regulations carelessly, apparently without a great deal of thought to the consequences to public health and the environment.

18 AAC 90.500 is being amended to read:

11 AAC 90.500. Permit for certain public pesticide programs or projects: *Except as provided in 18 AAC 90.510, a government entity may not, without first obtaining a permit issued by the*

¹⁶ Regulation language is taken directly from the .pdf document available on the ADEC website at <http://dec.alaska.gov/eh/docs/pest/Pesticide%20Amendments%20Public%20Notice%20Version%20May%2021%202012.pdf>

department, direct, carry out, allow, or participate in the spraying or application of a pesticide in any program or project, intended to apply pesticides to private property.

18 AAC 90.500 (a)(1) is repealed.

18 AAC 90.500(a)(2) is repealed.

The focus of this comment letter is to object to the repeal of the permit system currently required to authorize the application of pesticides by state agencies to state lands and rights of way.

However, in addition, I find the change in language with respect to private property also to be problematic. The proposed language "...intended to apply..." contrasts with the existing language "if that spraying or application affects property owned separately by two or more persons." The proposed language is carefully crafted to eliminate the need for a permit unless there is a specific intention of a state agency to spray on private property. ADEC itself recognizes that spray applications involve the potential and likelihood of drift and it recognizes that pesticides migrate in soils.

Since the proposed regulations fail to provide a mechanism to impose no-spray buffers to private property (or to anything else), a state agency spraying to the edge of its land or right of way, would expect (due to migration and drift and post-spray dust or debris blown by the wind) that adjoining private property would in most cases be affected. The existing regulation uses the word "affects" and thus accounts for this occurrence. Substituting the "intended" language sidesteps the requirement to obtain a permit, and thus eliminates the public's and the property owner's ability to participate in the permitting decision.

ADEC's apparent lack of regard for how private property, and the health of property owners, would be affected by the proposed regulations leads one to the conclusion that ADEC is placing too much emphasis on "streamlining" the use of pesticides and not enough on doing its job of protecting public health and the environment.

The existing 90.500(a)(2) should not be repealed and should remain in effect.

18 AAC 90 is amended by adding a new section to read:

18 AAC 90.640. Pesticide applications on state land. (a) Pesticide applications on land owned or leased by an agency of the state, or a right-of-way managed by it, are authorized if:

(1) the application follows a written Integrated Pest Management plan appropriate for the pest of concern pursuant to 18 AAC 90.645, and adopted by the agency applying the pesticide;

The guidance provide on .645 is vague, general, and inadequate and substantially simply outlines existing department policy¹⁷. See comments under proposed .645 below.

(2) the Integrated Pest Management plan is published on the department's website;

Conceptually, it is good to have an Integrated Pest Management (IPM) plan, to have it published on ADEC's website, and have it available so that it can be viewed by the public. But these regulations fall far short of how an IPM plan should be developed and administered. For example,

It is disturbing that the proposed regulations do not require ADEC to review and evaluate the IPM plan, and make a decision to approve it, disapprove it, or approve with conditions.

It is also disturbing that the public is provided no opportunity to comment on the plan and have those comments incorporated into the decision-making process.

And it is disturbing that the requirements for the content of the plan are inadequate to ensure that meaningful, useful, and consistent plans are developed and implemented.

See also my comments under .645 below.

(3) notification has been provided at least 30 days before the application, or 30 days before the first application of a multi-application project, by mail, return receipt requested, to public drinking water system owners and operators as defined in 18 AAC 80 if the application will occur within 200 feet of the water source;

I am troubled by the fact that this (3) is limited to public water systems and that no-spray buffers are not required. Also troubling is that this (3) is limited only to notification to the owners/operators that spraying will occur. There is nothing else in (3): no opportunity for the owner/operator to object in any way... no opportunity the owner/operator to participate in the decision to use a pesticide, no opportunity to request, much less require, a no-spray buffer, and no opportunity for the public (those who drink the water, for instance) to participate in any way.

In addition, this (3) fails to consider private water wells or water systems. There is no other provision, here or elsewhere within these proposed new regulations, that considers private water wells or drinking water systems... no provisions to identify private wells, no opportunity for the private well users to participate in the decision to use pesticides, no no-spray buffers.

¹⁷ ADEC website, Pesticide Control Program, Factsheets, IPM (Integrated Pest Management) More Effective Pest Control

Furthermore, there is no provision in this (3) or anywhere else in the proposed new regulations that requires the identification of water bodies in proximity or within a spray area. There is no provision, in this (3) or anywhere else in the proposed new regulations that requires that no-spray buffers be imposed to prevent the pesticides from reaching the waters of the state.

The citation 18 AAC 80 is incomplete, and would require the reader to search the entire chapter to figure out (guess at?) the specific provision cited.

This (3) also fails to provide guidance as to what information must accompany a notification (e.g., identification and description of the pesticide and pesticide formulation being sprayed, how much, when... etc.) and there is no guidance as to whether notification is required if there is a change in the operation, such as change in the pesticide formulation (e.g., a switch from Aquamaster to the Oust Extra/RazorPro/SWS formulation of the ARRC's 2006 proposal).

(4) the pesticide will be applied by an applicator certified by the department;

I agree that pesticides should be applied by a competent and properly trained applicator, but there is no provision for ADEC to be informed of even the name of the applicator, much less evidence of his proper certification and other credentials, as currently required under 90.515(13). Currently, an applicator agency must provide ADEC (and the public) "evidence that a person who directs, carries out, or participates in a pesticide program or project described in 18 AAC 90.500 or 18 AAC 90.505 has working knowledge of the pesticides to be applied, the necessary safety precautions, and potential impact on the environment; the evidence required by this paragraph must include proof of appropriate certification under 18 AAC 90.300 - 18 AAC 90.315." This requirement would not apply, under the proposed new regulations, to the terrestrial spraying of pesticides by state agencies to state lands.

(5) public notice of the application is provided in accordance with 18 AAC 90.640 (b);

See my comments under .640(b).

(6) the department is notified fifteen days in advance of an application on a parcel of land one acre or more in size, or greater than one mile in length;

It is troubling that ADEC's only involvement in the terrestrial use of pesticides by state agencies on state land is a 15 day notice, with no guidance on what that means. I elaborate on this in section ADEC is abdicating its fundamental duty

Turning first to the wording of (6), which is confusing and internally inconsistent (i.e., with respect to "one acre or more in size" versus "greater than one mile in length." What exactly is the purpose of the "greater than one mile in length" clause? An acre is 43,560 square feet. A mile is 5280 lineal feet. A width of 8.25 feet over one mile would equal one acre. If the railroad, for example, wanted to spray one mile of mainline track, 16 feet wide, would it need to notify ADEC? The spray area would be 1.93 acres, which means (since it is greater than one acre) notification would be required, but it is not over a mile in length, which means notification would not be required. It is confusing because application coverage is an "area" measurement, not a "lineal" measure. When one buys a can of paint, coverage is stated in square feet, not in lineal feet. This is just one of many indications that ADEC has put little serious thought in drafting these proposed regulations.

This (6) does not provide any guidance as to what a notification must contain. It doesn't even require that the notification be in writing. Is a phone call sufficient? What information must be provided to ADEC? Is such information as the time, location, purpose for the application, pesticide formulation, overview of the project, the name of the applicator, application method, quantity of pesticide, rate of application, etc. required?

(7) a record of pesticide use and notification is maintained by the land manager for five years and must be produced to the department upon request;

This (7) does not provide guidance as to specifically what information and data must be recorded and retained. Without guidance and standards for information and data collection and retention, the records will most assuredly be widely inconsistent among the agencies and be generally insufficient for any meaningful pesticide control or monitoring purposes.

(8) if 50 pounds or more of pesticides are used annually, the land manager must post a report each year on the land manager's website that describes how much of each product was used and where; and

This (8) is another example of the fact that ADEC, in proposing these new regulations, fails to recognize that pesticides vary in their toxicity, persistence, and migration characteristics. The fact is, some pesticides represent a greater risk to human health and the environment than others. These proposed new regulations fail to recognize, much less manage, this risk, as explained above under "The proposed regulatory changes fail to consider the risk to human health and environmental of different pesticide formulations." Fifty pounds of one formulation, in terms of risk to human health and the environment, can be equal to a teaspoon of another.

This (8) says only that the report contain “how much of each product was used and where.” This (8) severely reduces current information retention requirements, and is not sufficient to serve a useful purpose in monitoring and controlling the use of pesticides.

It is unclear whether 18 AAC 90.535 would apply if the proposed regulations were adopted. This ambiguity should be addressed. 90.535 provides useful information:

- (1) the dates of the treatment;**
- (2) the total amount of each pesticide used;**
- (3) an assessment of the success or failure of the treatment;**
- (4) any observed effect on human health, safety, or welfare, animals, or the environment;**
- (5) monitoring results, if under this chapter, the department required the permittee to conduct monitoring; and**
- (6) records required to be kept under 18 AAC 90.400 – 18 AAC 90.420**

This information, specified in 90.535 should be gathered, reported to ADEC, and retained for all spray operations, both public and private. This recommendation would mean that large private landowners such as farms would be required to gather and report this information to ADEC.

(9) the department is granted access to the property without prior approval during pesticide applications.

This (9) implies that ADEC contemplates the possibility of its looking at a particular spray operation, although the proposed regulations are silent on the necessity, frequency, purpose, nature, or scope of such a visit, or whether it would be in response to an emergency, public complaint, etc.

(b) If specific notice requirements under 18 AAC 90.625 or 18 AAC 90.630 do not apply, the agency applying the pesticide on a parcel of land one acre or more in size, or greater than one mile in length, must publish two consecutive notices of the pesticide application in a newspaper of general circulation in the affected area. The notice must be completed at least 30 days prior to application, and must include:

See (6) above for my comment objecting to the “or greater than one mile in length” threshold language. My concern applies as well to the language in this (b).

In addition, a “newspaper of general circulation in the affected area” is not sufficient notice” is not adequate notice. A lot of people do not read the newspaper these days, and those who do rarely read the notices section. This notification method would reach few people.

There should be a provision for posting notices in a central place such as the ADEC website. The public cannot be expected to periodically search through or negotiate the website of every state agency. There should be a central email list maintained so that concerned folks can be asked to notified in advance of all spraying. There should be an RSS feed or equivalent that folks could sign up for. There should be

physical notification on-site on the perimeter of, and various points within, a spray area. This is especially important along the railroad and state rights of way. There should be radio announcements (e.g., KTNA in Talkeetna) wherever possible. There should be notices posted at railroad depots if the railroad is spraying. All of the above should be required by regulation.

Line Item (2) "pesticides to be used" is not specific or detailed enough. The railroad, for example, could list Solution Water Soluble (SWS) described above. It would not have to notify the public that the only active ingredient is 2.4.-D (also described above). The notification needs to include this type of detailed information.

This (b) fails to provide guidance as to whether notification is required if there is a change in the operation, such as a change in the pesticide formulation (such as a switch from Aquamaster to the Oust Extra/RazorPro/SWS formulation of the ARRC's 2006 proposal). Such an action has significant public and environmental health implications, and the public should know about it.

Clearly, this (b) does not provide for reasonable public notification in advance of the application of pesticides or broadcast chemicals.

- (1) location of the proposed activity;*
- (2) pesticides to be used;*
- (3) the target species for the pesticide application;*
- (4) the method of applying the pesticides; and*
- (5) how the public can receive more information.*

This list of required information should also include the date spraying is to commence and when it is to end.

(c) Multiple pesticide applications can occur during one calendar year. Prior to the first application of the year during a multi-application project, notice must be provided pursuant to (a)(2) and (b). The notice must also provide an approximate number of applications for the proposed project.

This (c) refers to (a)(2) and (b). My objections and concerns for (a)(2), (a)(3) and (b) apply to this (c) as well. And, is (a)(2) a typo; should it be (a)(3)?

(d) The following pesticide applications are not subject to the requirements of this section:

- (1) application of antimicrobial pesticides;*
- (2) application of pesticides on a total of less than 1 acre of land during a calendar year;*
- (3) application of pesticides on less than a total of 1 linear mile during a calendar year;*
- (4) personal use insect repellent products; and*
- (5) application of pesticides inside buildings or structures.*

This (d) contains my same concern and objection about the inconsistent and confusing use of the one acre vs one linear mile language that I have expressed above.

18 AAC 90 is amended by adding a new section to read:

18 AAC 90.645. Integrated Pest Management Plan. *An Integrated Pest Management Plan (IPM) establishes a procedure for the use of pesticides in a manner that poses the least possible hazard to people, property, and environment whereby pesticides are used only after non-chemical methods have failed or are impractical. The IPM must include a description of:*

- (1) the preventive methods used, such as non-chemical practices and sanitation, to keep pest problems from occurring;*
- (2) the activities to monitor for the presence of pests;*
- (3) the thresholds for allowable pest presence;*
- (4) when appropriate, the use of mechanical and physical controls to reduce pest presence;*
- (5) the pesticide products used when determined necessary by the plan; and*
- (6) the identity of the person in charge described in 18 AAC 90.650.*

This .645 contains some useful requirements for inclusion in an IPM plan, and it may stimulate some constructive thought on the part of a prospective applicator agency, but that is all. Unfortunately, the requirements for the content of an IPM plan are so general and limited that such a plan would be virtually meaningless when addressing the risk to human health and the environment. In short, the six required topics of an IPM plan do not comport with the introduction to .645 stating that an IPM “establishes a procedure for the use of pesticides in a manner that poses the least possible hazard to people, property, and environment, whereby pesticides are used only after non-chemical methods have failed or are impractical.”

For example, it is not possible to achieve the “least possible hazard...” standard when there is

- **no requirement for the identification of water bodies,**
- **no requirement for the identification of private water wells,**
- **no public participation to identify areas such as railroad flagstops or biologically sensitive areas so that no-spray buffers can be established,**
- **no requirements that water bodies, public water systems, private water systems, private property, residences, be buffered by no-spray zones**
- **no assurance that pesticides do not reach the waters of the state**
- **no recognition of the varying risk profile (i.e., toxicity, persistence, or migration characteristics) among various pesticide formulations, other than what is on the EPA label. ADEC has shown in the past that the label is insufficient to protect the waters of the state**
- **and other things required in the existing permitting process**

I elaborate on these and many other concerns and objections to the proposed new regulations in the main text of my comments.

This .645 also does not provide for public participation in the development of the IPM plan. Development of these plans should be a full and meaningful public process.

This .645 also does not provide for ADEC to review, evaluate, modify, and approve or deny the IPM.

The six requirements of .645 are incomplete and woefully inadequate to accomplish the purpose of .645. They are also general and not specific. There are no performance standards. For example, the IPM, according to .645 must include a description of "(1) preventative methods used, such as nonchemical practices and sanitation, to keep pest problems from occurring;". The IPM Plan could say under this heading: "we tried pulling weeds and it didn't work." Under the regulation, that would suffice. There are no performance standards, ADEC isn't required to review or evaluate the IPM, the public is prevented from participating.

The result will be a wide and inconsistent array of IPM plans among the various agencies. Some agencies would probably make a good faith effort to achieve the purpose of .645, but many would lack the resources or expertise to do it right. And the lack of public and ADEC oversight and the lack of strict and specific guidance in the regulations will make protection of human health and the environment highly unlikely.

18 AAC 90 is amended by adding a new section to read:

18 AAC 90.650. Person in charge. The agency performing a pesticide project or program shall identify a person in charge to oversee pest control. That person will:
(1) develop and implement an Integrated Pest Management Plan in accordance with 18 AAC 90.645;

(2) ensure compliance with the Integrated Pest Management Plan;

(3) review and update the Integrated Pest Management Plan every 2 years;

(4) act as the point of contact for information on the pesticide project or program for the department and for the public; and

(5) when appropriate under the Integrated Pest Management Program, approve the use of pesticides and ensure they are used in compliance with this chapter.

This .650 is a tall order, and what ADEC is proposing would be quite a burden to impose on the applicator agencies. ADEC is shifting the responsibility/authority for the safe, proper, and legal handling of use of pesticides from itself to the various state applicator agencies. Should these proposed regulations be adopted, ADEC would be requiring an applicator agency to have a detailed knowledge of the many laws and regulations governing pesticide handling and use. It would also require that the applicator agencies gain a practical and technical knowledge of pesticide handling and use, and the effect on human health and the environment of the

various formulations. This would be a burden on the individual agencies, and certainly on the "person in charge" who becomes accountable, and a strain on the normal agency budgets. In an effort to save money, corners would be cut, and public health and the environment would suffer. In addition, the economies of scale associated with centralizing this knowledge and experience within ADEC would be lost as each applicator agency would have to reinvent the wheel. It is not realistic to expect that a 'person in charge' model would result in the development of effective pesticide control, such that human health and the environment is protected, in each of the applicator agencies.

Conclusion

These regulatory changes proposed by ADEC represent a sea change in the way pesticides are controlled, or in this case, not controlled, in Alaska.

How and to what extent pesticides are used in Alaska is a significant public and environmental health issue. With these proposed regulations, ADEC is poised to take Alaska down the same unfortunate path followed by most states in the lower 48... the misuse and overuse of pesticides.

I don't know anybody who thinks that the misuse and overuse of pesticides is a good thing. And yet, this would be the exact outcome that ADEC is now proposing to impose on the citizens and environment of Alaska.

Regulation should never be amended in a vacuum, without knowledge of the extent and effect of pesticide use that is occurring today. Does ADEC have data indicating whether or not pesticides are currently being misused or overused in Alaska, on both private and public lands and rights of way? Does ADEC know the proportion of pesticide use that occurs in Alaska is on state lands versus private lands? Does ADEC have meaningful data on the human health and environmental effects of pesticide use in Alaska? I suspect the answer to these questions is "no", for, according to ADEC's Karin Hendrickson, "... possibly start doing water monitoring, which is not something we currently do, to see if there are pesticides getting into the environment that we don't know about."¹⁸

ADEC should know the answers to these questions, as it would enable ADEC to then determine to how best to monitor and control pesticide use in order to protect human health and the environment. If it would require additional funding to gather this data, then ADEC should seek additional funding.

¹⁸ KTNA news report June 21, 2012

And yet, without such information and data, ADEC is proposing to throw out a pesticide permitting process that plays a crucial role in protecting human health and the environment. The proposed regulations would fail the public in many ways, among them:

- failure to allow the public to be heard on this very important public health issue: the use of pesticides
- failure to identify and protect water bodies and drinking water systems
- failure to contemplate and establish no-spray buffers necessary to protect human health and the environment
- failure to recognize and consider varying levels of risk to human health and the environment represented by the various pesticides
- failure to recognize that EPA label is not sufficient to account for risk to human health and the environment
- failure to recognize that the best judgment of an applicator agency is insufficient to protect human health and the environment
- failure to protect from contamination the places where people congregate
- failure to provide reasonable notice to help prevent the public from being involuntarily or unknowingly exposed to the toxic chemicals
- failure to protect private property.

These are significant "failures," which demonstrate that ADEC, under these proposed regulations, would be abdicating, in a big way, its fundamental duty to protect human health and the environment. And it is proposing to do so for reasons that are without merit, especially when compared to the enormous public harm that would surely result if these regulatory changes were adopted.

And, further, ADEC has concealed or mischaracterized the true nature and scope of the proposed regulation changes, to the extent that precludes meaningful, informed comment by the general public.

ADEC should abandon and discard these proposed regulatory changes. They are contrary to the public interest and adopting them would have unreasonable adverse effect on human health and the environment.

Sincerely,



John Strassenburgh