



ANCHORAGE WATERWAYS COUNCIL

P.O. Box 241774 • Anchorage, Alaska 99524-1774 • (907) 272-7335
<http://www.anchoragecreeks.org>

June 22, 2010

Mr. Gary Mendivil
Alaska Department of Environmental Conservation
P.O. Box 110001
Juneau, AK 99811-0001

Re: Permit No. 10-SOL-01 issued April 30, 2010

Dear Mr. Mendivil:

This letter is in response to the pesticide permit issued to the Alaska Railroad Corporation (ARRC) listed above. The Anchorage Waterways Council (AWC) is greatly disturbed by this issuance. Our mission is to “protect, restore, and enhance the waterways, wetlands, and associated uplands of Anchorage”. In 2006 the AWC opposed the permit then submitted by ARRC, and we still take that stance. After reviewing the permit, the comments and responses, the decision document, and some of the application materials, AWC does not feel that DEC had adequate materials or information—particularly in the “maps”—to make an informed decision.

There are many factors that have been pointed out by the Trustees for Alaska in their request for an Adjudicatory Hearing, and they will not be repeated. I will add to them from the perspective of what I believe is ADEC’s inability to have a clear understanding of the route that the ARRC proposes to spray along based on the statutes that govern the permit application.

First, for clarity there is some confusion about the starting and ending points of the designated spray area. The Decision Document dated April 30, 2010, states that a permit for spraying is approved between Seward and Indian (p. 1). However, on p. 2 the “Background Information” in the same document it states,

2.0 BACKGROUND INFORMATION

On May 22, 2009, the DEC received a pesticide use permit application from the Alaska Railroad Corporation (ARRC) to apply herbicide for the purpose of vegetation management. Additional documentation was provided through June 26, 2009, when the permit application was determined to be complete. The ARRC proposes to apply herbicide to selected sections of the 90 mile segment of the railroad right-of-way between Seward and Bird, Alaska, as well as the spur line to Whittier, and portions of the Seward Rail Yard.

There is a geographical difference between Bird, Alaska, (MP 80) and Indian, Alaska, (MP 88.6 to MP 89). Further compounding this issue is that the table of starting and stopping mileposts on pp. 2-3 of the Decision Document includes the Main Track and Siding at Indian, MP 88.6-89.0, and it does not include the spur line to Whittier except for the portion that is part of the main track area.

On the Responsiveness Summary dated April 30, 2010, which is formally titled,

**Department of Environmental Conservation
Division of Environmental Health
Alaska Railroad Corporation
Application for Permit to Use Pesticide
for Vegetation Management
on Railway Right-of-Way Between Seward and Indian**

the geographical area states “Seward to Indian”. However, on p. 1 of 49 is the following statement:

The application area would be selected sections of the 90 mile segment of the railroad right-of-way between Seward and Bird, Alaska, as well as the spur line to Whittier, and portions of the Seward Rail Yard.

This states that the spraying is between Seward and Bird. AWC requests clarification of the correct area that is being considered in this permit in order to determine the precise areas that ARRC is asking to spray with pesticides, and that the associated table in the Decision Document be corrected.

Because there is some confusion on the geographical area, the “maps” were examined. These so-called “maps” were requested by me from Ms. Karin Hendrickson at ADEC, who complied quickly and mailed them on 2 CDs. I have printed them all out and looked them over carefully. My background is in cartography and geography—both of which I have taught for years at the university level, and for which I have advanced graduate degrees.

First, I would not call these maps. They are aerial photos that have had some annotation added by hand and in a few cases by digital text. Because the review documents suggested that there were maps and aerial photos, I checked with Ms. Hendrickson to see if there were some “real maps” that were not sent to me. She replied in an email dated June 21, 2010, “There are no additional maps.” I will not partake in a game of semantics here, but typically a map or other graphic representation of the environment contains certain elements: a north arrow, a distance scale, a title, labels, and a legend. The majority of the “maps” provided for public comment and ADEC review are lacking these elements, which makes it extremely difficult to make informed decisions on the impact that this pesticide application can have on water bodies, surface water, ground water, etc., all of which are of utmost concern to the AWC who oversees the entire Municipality.

I have reviewed the approximately 40 “map” documents that are designated by Milepost (excluding the Seward Yard), and have yet to find one that has a title, a north arrow, a legend, a scale, or any named water bodies or other features. What I thought to be even more bizarre was that the milepost “maps” near Seward were oriented with West at the top of the map and they slowly rotated until the final map at MP 88 (Indian) was oriented with East at the top. Moving through the series, the “maps” rotate around through 180 degrees of orientation without a single indication of their true cardinal direction, which is certainly not considered professional. These “maps” also do not fit the definition provided by ADEC of “the location depicted on a map or plat issued by the United States, the state, or a municipality” because they are from Google.

Another issue that was particularly disturbing was the lack of a legend. All “maps” had a single hand-drawn black line (i.e. done with a marker) that had end lines signifying a start and stop, and some of them even had the MP number that corresponded (usually) to the table on pp. 2-3 of the Decision Document, but several maps had other markings on them. These included double lines and rectangles (see below). With no legend, it is impossible to decipher what these elements mean.



Fig. 1 MP 11

With no scale, it was impossible to make any judgments as to their proximity to water bodies, nor were any of the water bodies, i.e. Turnagain Arm, labeled. The quality of some of the “maps” was so degraded that it was impossible to tell land from water from snow. A couple of the best examples are “maps” MPF 5 (following) and MP 19.

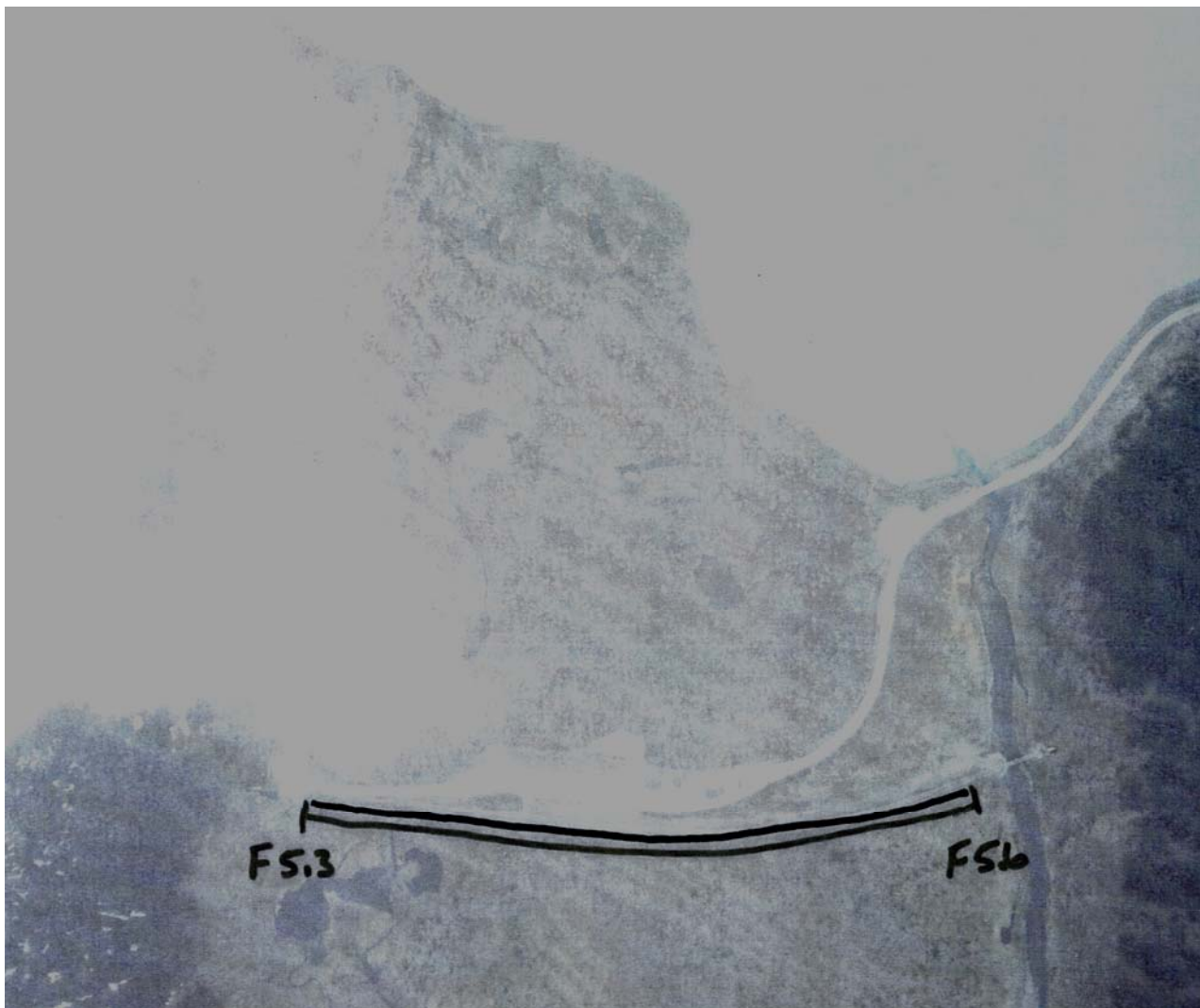


Fig. 2 MPF 5 There is no orientation to this map, although it is probably West at the top. Where is land, water, snow, road, railroad, vegetation? What is the double line?

Sometimes the hand labeling of the lines and mileposts did not show up well on dark backgrounds so it was near impossible to decipher a start or end point and its label (see Fig. 1 to try and find MP 11.8). On some “maps” when the black line ended or started at the edge of a page, there was no indication as to what part of the segment this was, i.e. MP 9.3, nor was there any note that the spray line continued on another page.

Ms. Hendrickson assured me that the “maps” were tied to the tables on pp. 2-3 of the Decision Document, yet I found errors in the table. On the “maps” for MP 19 and 20, the table states that the spraying area runs from MP 19.4 to 20.3 without a break.

Location	Start Mile Post	End Mile Post	Miles	Linear Feet	Area (* 8 Feet)	Acreage
Main	19.4	20.3	0.9	4,752	38,016	0.87

Yet, on the MP “maps”, the black hand-drawn line runs from “19.4” on MP 19 to the edge of the paper, stops without any indication as to what this ending MP distance is, starts up again, without any indication as to the starting point on MP 20’s left edge, ends at an unnamed point by an unnamed river, and begins again at “20.1” until “20.3”. This is illustrated in the two photo excerpts below. And, one extrapolation that can be drawn from this is that the numbers in the table are incorrect. I did not check all of them, but this mistake makes me uncomfortable with accepting the figures provided by ARRC. There does not seem to be the attention to detail in this area, which makes other promises and commitments questionable.

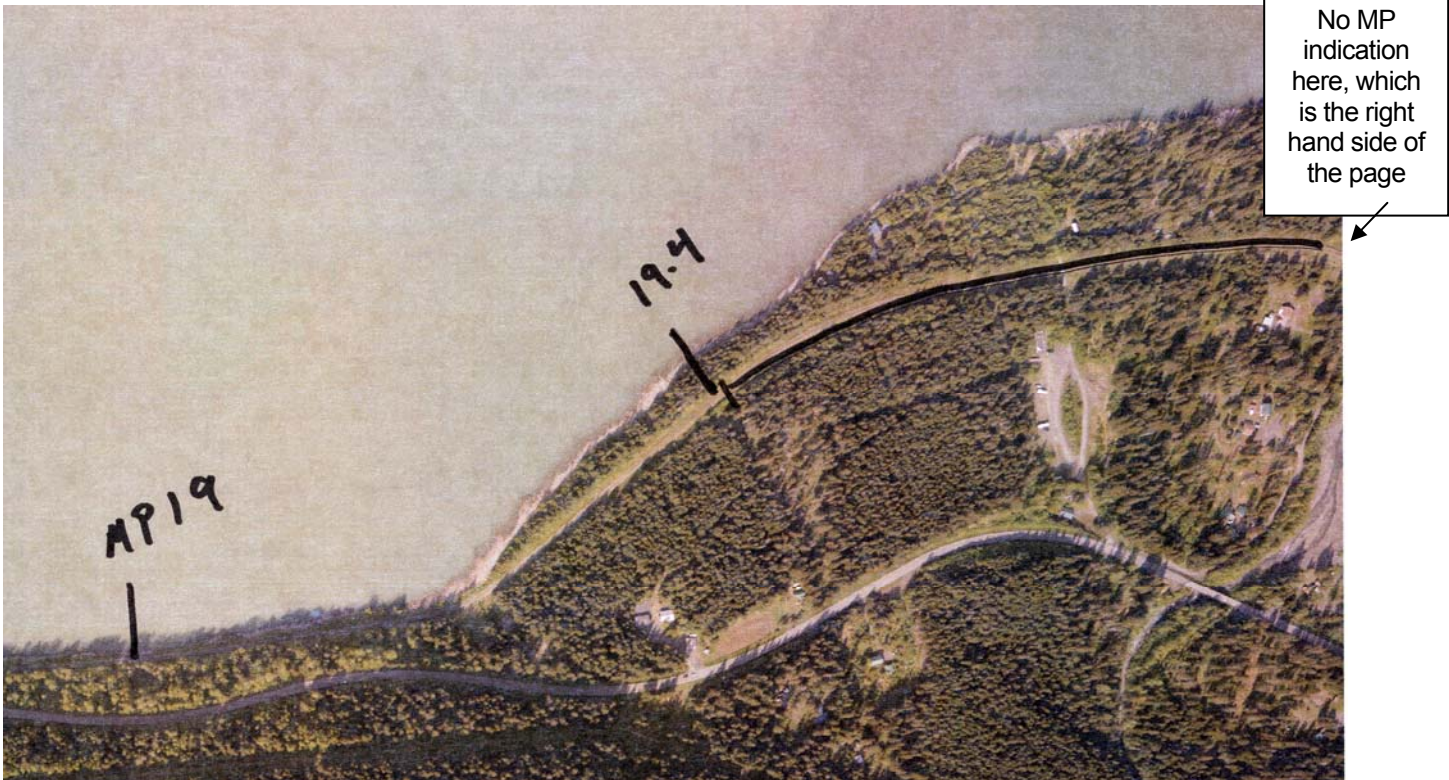


Fig. 3 MP 19

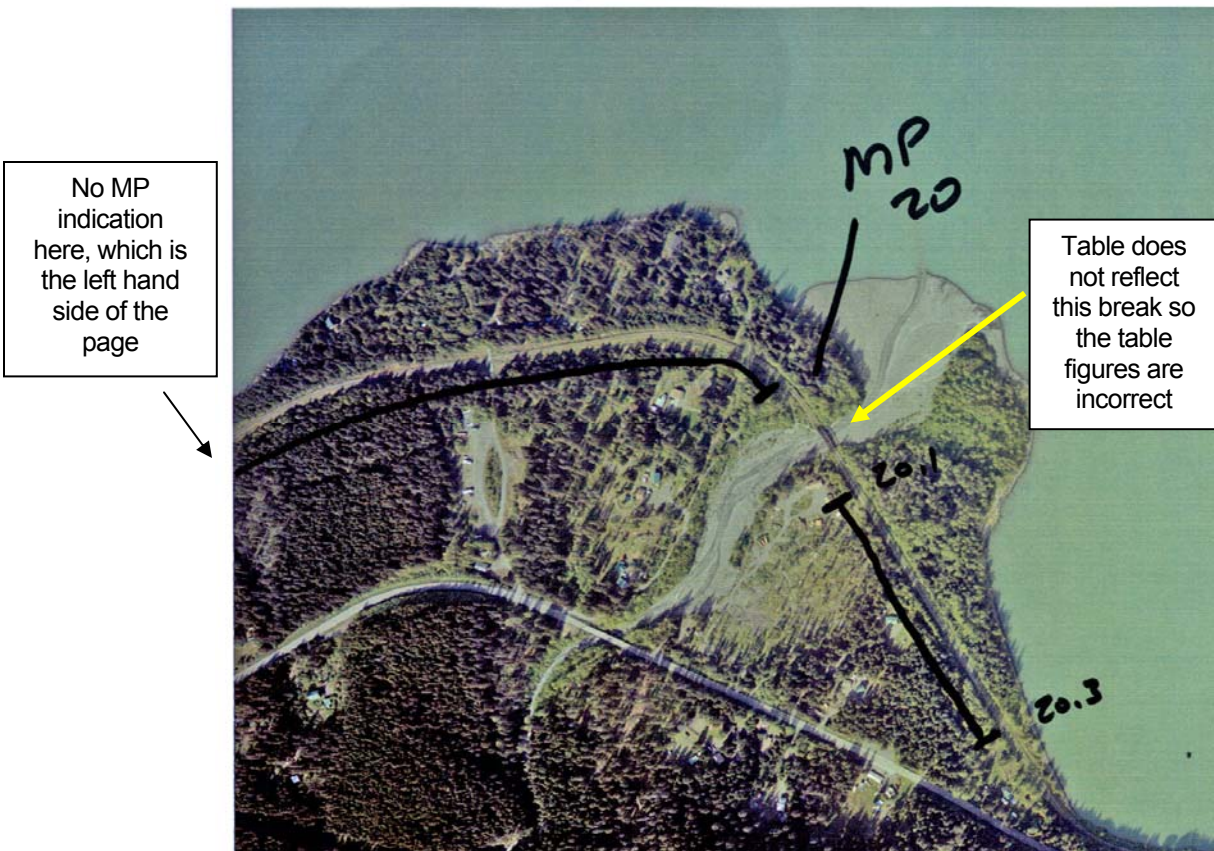


Fig. 4 MP 20

In my opinion, another problem with the table is the way that the numbers are calculated. Granted that if you multiply the linear distance by a width of 8', you can turn this into a seemingly innocuous number of acres. 58 acres—if that is correct—does not sound like much. However, we are also talking about linear miles of track. The reports state, if the permit is to go to Indian, then it's approximately 90 miles of track. By adding up the column in the table labeled "Miles", the total is 29.7 miles, which sounds much greater than a mere 58 acres. This is approximately 33% of the distance asked for in the permit (assuming Indian is the end point). This leads to another question, how is the ARRC going to control the vegetation in the other 60 miles? It seems that starting and stopping to identify water bodies, determine if the area should be hand-sprayed, delineating the areas that are to be sprayed and those that are to be left without vegetation removal is time consuming, costly, and prone to error.

Do the ARRC and the ADEC know all the water bodies along this corridor? None were named by the applicant, and there are some considerable ones as well as very small ones such as waterfalls. There are at least a dozen waterfalls that drain down adjacent to the track at MP 77 which is a proposed spraying area between MP 76.1 and 78.1. In the following photo you will note the MP 77 sign and a waterfall just to the right of it. If ADEC personnel travelled down this corridor, then why weren't these noted?



Fig 5. MP 77 and one of a dozen waterfalls in this stretch that are clearly within 100' of the track
(photo by C. Northon on 6/12/10)

Finally, I would like to state that I find the language in the permit to be very loose. Most of the statements are qualitative rather than quantitative, which leaves much to interpretation rather than strict limits for the ARRC. Some examples of the terminology that is disturbing includes:

- no **'unreasonable'** adverse effect (*What is considered reasonable or unreasonable?*)
- Risks to human health, safety, and welfare are **'considered low'** (*How do we define low?*)
- the **'low likelihood'** that the proposed pesticide use will result in off-site transport of pesticides (*What is low?*)

- Less information is available for the surfactant Agri-Dex [than for AquaMaster], but **'some'** literature is available on this as well as other surfactants. (*How much is some literature? What value is literature for other surfactants?*)
- **'In most cases'**, glyphosate **'alone'** had no effects. (*However, there must be cases where there was some effect. And, it is being combined with another product so why mention its effects as though it was being applied alone?*)
- Agri-Dex was found to be the **'least toxic'**...than the most toxic surfactant. (*If the toxicity was 100% for several and Agri-Dex was 99% toxic, then this statement is true—but misleading.*)
- Based on the analysis provided above, DEC **'does not expect an unreasonable adverse effect'** to water resources, animals, the environment, or human health, welfare, and safety. (*What is considered an unreasonable adverse effect?.*)

This discussion could continue, but I believe several points have been made regarding the language in the Decision Document.

The actual permit mandates reports on usage, effects, and impacts (#14 on pp. 2-3), yet there is no description of how these will be monitored, tested, or recorded. As an organization that does water quality monitoring, AWC would like to know how ARRC is supposed to meet this requirement.

In closing, I would like to point out that the criteria noted for denial by the ADEC for a permit (p. 5 of Decision Document) states that if “the applicant has failed to supply information of evidence required by 18 AAC 90” then it could be denied. 18 AAC 90.515 has the following provisions under #8 on pp. 19-20 (<http://www.dec.state.ak.us/regulations/pdfs/18%20AAC%2090.pdf>):

(8) a description of the treatment area where the pesticide will be applied, including

- (A) the location depicted on a map or plat issued by the United States, the state, or a municipality;
- (B) the size of the treatment area;
- (C) vegetation in the treatment area;
- (D) each potentially affected surface water or marine water body within 200 feet of the treatment area, or each public or private water system within 200 feet of the treatment area; in this subparagraph, “public water system” and “private water system” have the meanings given in 18 AAC 80.1990; [the ARRC only states 100’ and ADEC seems to accept this]
- (E) soil type, including drainage characteristics, in the treatment area; and
- (F) average annual precipitation;

AWC contends that the so-called “maps” used in this permit do not meet the criteria in 8A because they are Google images without any conventional and accepted mapping information, the affected surface or marine water bodies within 200 feet need to be depicted and named, and there is no evidence of vegetation, soil and annual precipitation for any of the areas that ARRC wants to spray. The permit information that I have examined does not meet the ADEC criteria that should stand for approving this permit. I request that an immediate Stay on this permit as well as the Adjudicatory Hearing be granted and the entire application process be examined for its inadequate provisions. As we are all learning, it is better to do things correctly beforehand than try to fix them after.

Respectfully submitted,



Cherie Northon, Ph.D., Executive Director

Xc:

Governor Sean Parnell
 Karin Hendrickson (ADEC)
 Kristin Ryan (ADEC)
 Trustees for Alaska/ACAT
 AWC Board of Directors