

CASE INVESTIGATION REPORT

Case Number: NML-0025-15

Investigator: Neil Lanning

I. INTRODUCTION/LOCATION

The Washington State Department of Agriculture (WSDA) was contacted on December 14, 2015 at 1:30:00 PM by Inessa Pearce regarding an herbicide application to forest land northeast of Sultan and possible contamination of watershed. An investigation was initiated on 12/14/2015 by Neil Lanning. The original call was taken by Neil Lanning. The location of the incident was stated in the ERTS as being 115 acres north of Sultan Startup Rd. between Sultan and Startup, Snohomish County. Upon investigation it appears the location is in the south half of Township 28, Range 8 East, Section 27 which is northeast of Sultan and approximately a half mile from the complainants house. Then on December 29, 2016 a "Letter of Protest" was emailed to the Director of Washington State Department of Agriculture which included additional forest land in sections 11, 13, 14, 15, 23, 24, 25, and 26 of Range 8 East, and sections 18, 19, 20, 29, 30 Range 9 East, of Township 28.

II. PARTIES INVOLVED

Complainant	Inessa Pearce
Alleged Infractor	Spring Board - Wallace Falls LLC Contact Name: Mark Baugh
Aerial Applicator:	Wilbur Ellis Co, Branch 41740 Contact Name: Dan Foster
Complainant:	Sky Valley Environmental & Economic Alliance (SVENA) Contact Name: Inessa Pearce
Referring Party	Department of Ecology ERTS661507 Contact Name: Colleen Crotty

III. EVIDENCE OBTAINED

Investigator Observations

Observations related to the ERTS

- The complaint ERTS came with very little specific information included. The date of the application was stated to be approximately 3 months prior to the date the complaint was filed. It would be highly unlikely to be able to see any signs of chemical drift with this much time between the application and the filing of the complaint – especially at this time of year.

- On Tuesday 12/15/2015 I (Neil Lanning) contacted Steve Ranton, Northwest Regional office of the Washington State Department of Natural Resources to see if I could find where the application being complained about had occurred and who would be in charge of the application. Mr. Ranton suggested the application could have been part of one of two different Forest Practice Applications (FPA 2814793 for conifer release or FPA 2814705 for pre-plant preparations).
- Mr. Ranton suggested that most likely it was on property owned by Spring Board – Wallace Falls LLC and that Mr. Mark Baugh was the contact person at this firm.
- I called Mr. Baugh and visited with him. He believed he knew the application site that was being complained about. I verbally requested application records from the site and he emailed the information to me on 12/17/2015.
- The complainant stated the application took place around 9/20 on 115 acres. Mr. Baugh sent me a map and application records for a 115 acre application that took place on 9/21/2015. This application was done under FPA 2814793.
- Based on the complainants name and the results of searching various sources of information, it was determined that the records provided by Mr. Baugh is for an application located approximately 0.5 miles north of the complainants residence.
- See table titled “Tank Mix 4” below for details of what was applied to this unit.
- There is no standing water or unbuffered streams in the area where the application occurred when looking at the site using Google earth. There are standing trees in the area where the site map furnished with the application records show a stream. The site map also shows the application went around these trees.

Observations Related to the broader complaint contained in the Letter of Protest.

- The Letter of Protest expands the complaint to cover all of the land pesticides were applied to under FPA 2814793 and FPA 2814705 were for conifer release and pre plant preparations respectively. The two FPAs cover a total of 1056 acres.
- I emailed Dan Foster, Wilbur-Ellis Co. Branch 417400, a written record request on January 12, 2016. The application records were submitted the same day.
- While acres the actual acres applied to total 971 acres. At least part of the difference appears to be no spray buffers around stream beds. This acreage was divided up into 16 units.
- The same pilot applied all of the herbicides applied to all of the parcels.
- The applications took place on September 18, 19, 20 and 21, 2015; which were Friday, Saturday, Sunday and Monday.

- There were 4 different tank mixes applied. All included enough water as a carrier so the total mix applied to an acre was 10 gallons.

Tank Mix 1: Applied to 100 acres in 2 units for pre-plant site preparation.

Product Name	EPA or WA Reg #	Fl. Oz. / Acre
Alligare Glyposate 5.4	81927-8	64
Alligare SFM Extra	91927-5	4
Wilbur-Ellis Syl-Tac	AW2935-00004	6
Crosshair	2935-11001	4

Tank Mix 2: Applied to 230 acres in 6 units for pre-plant site preparation.

Product Name	EPA or WA Reg #	Fl. Oz. / Acre
Alligare Glyposate 5.4	81927-8	64
Alligare Rotary 2 SL	81927-6	16
Alligare SFM Extra	81927-5	4
Premium MSO Methylated Spray Oil	5905-90001	64
Crosshair	2935-11001	4

Tank Mix 3: Applied to 335 acres in 5 units for pre-plant site preparation.

Product Name	EPA or WA Reg #	Fl. Oz. / Acre
Alligare Glyposate 5.4	81927-8	64
Alligare Rotary 2 SL	81927-6	24
Alligare SFM Extra	81927-5	4
Premium MSO Methylated Spray Oil	5905-90001	64
Crosshair	2935-11001	4

Tank Mix 4: Applied to 306 acres in 4 units for conifer release

Product Name	EPA or WA Reg #	Fl. Oz. / Acre
Alligare Glyposate 5.4	81927-8	64
Alligare Imazapyur 4 SL	81927-24	2
Syl-Coat	2935-12002	0.5
Crosshair	2935-11001	4

- All of the applications were made by pilot, and currently licensed Commercial Operator, Corbett Martin Baker working for Wilbur Ellis Co., 403 Coulson Rd, Chehalis, WA 98532.
- All rates applied are at or below the rate allowed on the product labels.

- There were no adverse weather conditions recorded in the application records.

Testimony

Inessa Pearce (Complainant) Date: 1/14/2016 3:50:00 PM

Inessa Pearce called me (Neil Lanning) in response to an email I sent her this morning (January 14,, 2016). I asked her to describe to me what she saw. She replied, it was sunny, calm and warm. It was on a weekend. There were several people watching and they saw a helicopter going on a ridge behind the house. People were commenting about it raining poison. They understood it was not organic fertilizers. The helicopter was loud and they did not know it was coming. It applied pesticides for several days.

When I asked how close the helicopter was she replied "It was several miles away going over the ridge." She also stated, "nobody proved it did not drift."

Sky Valley Environmental & Economic Alliance (SVENA) (Complainant) Date: 1/12/2016 11:00:00 AM

Date: December 29, 2015

Subject: Letter of protest for massive toxic herbicide spray in Sultan-Startup area, WA

To:

Springboard Wallace Falls LLC
Governor of WA State Jay Inslee
Congresswoman Suzan DelBene
Members of the WA Senate Natural Resources and Parks Committee
WA Department of Agriculture
WA State Department of Health
WA State Department of Ecology
DNR Commissioner Peter Goldmark
WA State Forest Practices Board
DNR Northwest Region
Snohomish County Elected Officials
Snohomish County Planning & Development Services
Snohomish Health District
Snohomish County Board of Health
Snohomish County Council
Sky Valley City Governments – Sultan, Gold Bar, Index, Monroe, Snohomish

CC:

Tulalip Tribes
WA Environmental Council
ALPS (Alpine Lakes Protection Society)
NCCC (North Cascades Conservation Council)
Sierra Club, WA State Chapter
Sierra Club of Snohomish County
WFLC (Washington Forest Law Center)
WA Toxics Coalition
NCAP (NW Center for Alternatives to Pesticides),
FOWS (Friends of Wild Sky)
PAS (Pilchuck Audubon Society)
Forterra
Wild Washington Rivers
Friends of Heybrook Ridge
Index Wall (newspaper)
Michael Whitney, Melanie Russell (Snohomish County Tribune)
Chris Henrickson (Monroe Monitor)
Amy Nile (Everett Herald)
Linda Mapes (Seattle Times)
Alison Morrow (KING 5 NEWS)
Q13 FOX NEWS

BCC:

SVENA mailing list (Skykomish Valley residents, business owners, heads and members of non-profits)

Dear Sir/Madam,

Sky Valley Environmental & Economic Alliance (SVENA) would like to inform you that around September 20, 2015 timber company Springboard Wallace Falls LLC executed a massive toxic chemical spray from a helicopter under Forest Practice Applications (FPAs) # 2814793 (252 acres) and 2814705 (804 acres) for a total of 1,056 acres. The spray consisted of a mix of toxic herbicides. (For a list of chemicals and information about them, please see <http://svena.org/current-projects/chemical-spraying/>.) This application took place on several consecutive days in the Sultan Startup area, North of Hwy 2.

There was no advance warning to the residents of this area for this huge spraying operation in our water- shed. Local citizens were horrified and upset when they observed for hours a helicopter with toxic clouds around it. This neighborhood has numerous homes, families, children, businesses, farms and organic farms, gardens and orchards. The residents are very concerned about their well water. There are many private wells in this area and most of them are shallow.

No company or government agency performed follow-up testing or monitoring for possible drift or contamination of non-targeted properties and resources, such as air, surface water and well water. Past evidence has demonstrated that:

1. Herbicides often move away from the intended target through drift, run-off, leaching into groundwater, and volatilization and condensation (evaporating and coming down elsewhere, in rain), poisoning well water, streams, rivers and Puget Sound.
2. Pesticides (herbicides and insecticides) have been documented to concentrate in the air, in valley fog.
3. Very few monitoring studies have been done, on aerial application of pesticides on forestlands. One of the most recent was the 1993 WA State Department of Ecology study "Effectiveness of Best Management Practices for Aerial Application of Forest Pesticides" by Rashin and Graber. In that study, despite knowing they were being monitored and using "best management practices," (which have not changed much since then), ALL seven tested streams were contaminated with pesticides. After that, larger buffers were recommended, but many of the same buffer widths are still used, without follow-up monitoring, to see if streams are being contaminated. It is quite likely that contamination of water is occurring.
4. Some of the chemicals listed on the FPAs have been linked to cancers, neurological damage and other negative health effects.

Local residents and their children, pets, livestock, bees, fruit trees, organic gardens and farms, woodlots, salmon in the rivers, etc. deserve to be free from chemical trespass. We also deserve clean water to drink and clean air to breathe. Public health and safety should not be compromised for industry profits.

The United States Forest Service has managed to conduct successful commercial forestry in the Mount Baker Snoqualmie National Forest for a great many years without using chemical pesticides (herbicides or insecticides). We strongly suggest that private and state timberlands in WA could be managed in the same way, without the aerial application of chemical pesticides. The Forest Practices Board has the responsibility to craft and enforce regulations that protect Washington's citizens from pesticides applied to forestlands, and monitor the effects of these chemicals on the ground.

We would like a prompt and concrete response from your agency in regards to this serious situation that is endangering public health and safety by execution of aerial toxic spraying in populated watersheds, and in regards to prevention of this situation in the future.

Sincerely,

Inessa Pearce

President

SVENA (Sky Valley Environmental & Economic Alliance)

svena.org

Spring Board - Wallace Falls LLC (Alleged Infractor) Date: 1/12/2016 11:00:00 AM

Mark Baugh, Spring Board Wallace Falls, stated that the chemicals originally sent to Inessa Pearce in an email was in error. Oust and MSO was not included in the actual application on the 115 acres. The applicators records are correct. Oust and MSO was included in the mix on some of the other parcels of timber covered by the two Forest Practices Applications.

Inessa Pearce (Complainant) Date: 12/14/2015 1:30:00 AM

The following email from Inessa Pearce was included in the ERTS message. (Note: It appears there were hyperlinks in the original email that did not transfer into the ERTS.)

From: Inessa Pearce [mailto:inessapv@yahoo.com]

Sent: Sunday, December 13, 2015 7:45 PM

To: ECY DL NWRO ERTS <NWROERTS@ECY.WA.GOV>

Subject: Massive toxic spray in Sultan, WA

Hello. I would like to inform you that around September 20 of this year there was a massive spray of herbicides from a helicopter for three days. Here is a list of materials sprayed on 115 acres North of Sultan Startup Rd. between Sultan and Startup, Snohomish County:

Alligare Glyphosate 5.4 30 oz./acre

Rotary 2 SL(Imazapyr) 2 oz/acre

SMF Extra (Oust) .5 oz./acre

SuperSpread MSO 4 oz./acre

Glyphosate is a potent herbicide linked to cancer. Please google `widely used herbicide linked to cancer` for more info and articles in many prominent publications.

Imazapyr is a potent and toxic herbicide. More info for Imazapyr is here.

Oust is a potent and toxic herbicide. More info for Oust is here.

SuperSpread MSO is a toxic surfactant. More info for SuperSpread MSO is here.

Would you please let me know who will be the best person to contact in DoE in regards to this disaster. Local residents are very concerned about their shallow wells and drinking water as this massive herbicide spray contaminated their watershed. And would you please advise me who should be responsible for well and drinking water testing.

Inessa Pearce

Sultan, WA

Samples

Records (application / distribution)

Records were received as requested, but were not on a WSDA adopted or approved form, but acceptable for the request.

License Review

Name	License# or Unlicensed	License Type	License Categories	License Start	License Expiration
Corbett Martin Baker	CO-84846	Commercial Operator	Agricultural Insect and Disease (2/8/2013); Agricultural Weed (2/8/2013)	2/8/2013	12/31/2015

Label Review

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Alligare Glyphosate 5.4	81927-8	Glyphosate isopropylamine salt (53.8%);	Y	Aquatic		

This label states: "This product may be used in and around water (aquatic areas) and wetlands found in forestry ...including where these sites are adjacent to or surrounding domestic water supply reservoirs, supply stream, lake and ponds ... There is no restriction on the use of treated water for irrigation, recreation or domestic purposes."

"Restriction: Do not apply this product directly to water within 1/2 mile up-stream of an active potable water intake in flowing water (i.e. river, stream etc.) or within 1/2 mile of an active potable water intake in a standing body of water such as lake, pond or reservoir."

Application rates vary on the label depending on the target plant being controlled. Thirty oz. per acre was applied on 306 acres and 64 oz. per acre was applied on 630 acres. The application rates are within the amount allowed by the product labeling.

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Alligare Imazapyr 4 SL	81927-24	Imazapyr isopropylamine salt (52.6%);	Y	Aquatic		

This label states: "This product may be applied on forestry sites that contain areas of temporary surface water caused by the collection of water between planting beds, in equipment ruts, or in

other depressions created by forest management activities ... It is permissible to treat drainage ditches, intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains, and transitional areas between upland and lowland sites when no water is present..."

The label calls for 8 to 12 fl. oz. per acre for release from hardwood completion in Douglas fir stands. The application record shows this was applied to 306 acres at 2 fl. oz. per acre – well below the limit. WAC 16-228-1225 allows pesticides to be used at lower rates than the label calls for unless it is specifically prohibited on the label.

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Alligare Rotary 2 SL	81927-6	Imazapyr isopropylamine salt (27.8%);	Y			Y

The labels states "Alligare Rotary 2SL controls undesirable vegetation in forestry use sites managed for timber production, including forest roads. Alligare Rotary 2 SL may be used on 1)forestry sites that contain temporary surface water in areas caused by forest management activities; 2) to that drainage ditches(edges only if wate is present), intermittent drainage, intermittently flooded low lying sites, seasonally dry flood plains and transitional areas between up land and lowland sites when no water is present; and 3) be applied to marshes, swamps and bogs after water has receded, as well a seasonally dry flood deltas, except in the states of California and New York; 4) pasture grass, rangeland and other labeled non-cropland areas."

The label allows application rates up to 80 fl. oz. per acre. Two fl. oz. per acre was applied on 306 acres.

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Alligare SFM Extra	81927-5	Metsulfuron-methyl (15%); Sulfometuron methyl (56.25%);	Y			Y

The label states "Alligare SFM Extra is a dispersible granule that is mixed in water and applied as a spray...for the following uses:

- In conifer plantations and non-crop sites for control of many annual and perennial grasses and broadleaf weeds....
- For control of certain woody plants, vines and herbaceous weeds in site preparation and release of various conifers....

Alligare SFM Extra may be applied to non-crop sites and conifer plantations and non-crop that contain areas of temporary surface water caused byh collection of water between planting beds, in equipment ruts, or in other depressions created by management activities. Intermittently flooded low lying sites, seasonally dry flood plains, transitional areas between upland and lowland sites, marshes, swamps, bogs and seasonally dry flood deltas may be treated when no water is present. DO NOT make application to natural or man-made bodies of water such as lakes, reservoirs, ponds, streams and canals....

Do not apply more than 5-2/3 ounces of Alligare SFM Extra per acre per application to forestry sites," Alligare SFM Extra was applied at the rate of 4 fl. oz. per acre on 630 acres.

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Crosshair	2935-11001	Alkyl amine salts of fatty acids (0%); Benzoic Acid (0%); Modified vegetable (seed) oil (0%);	Y			Y

Directions for use this product states:

- Use 4 fluid ounces of CROSSHAIR per acre. Application records show 4 fl. oz. were used per acre on 306 acres.
- Not for Aquatic Use in Washington. Maps with application records where this product was used show buffers around streams.

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Premium Methylated Spray Oil	5905-90001		Y			Y

The label for this product states; " The addition of METHYLATED SPRAY OIL to a spray tank improves pesticide application by modifying the wetting and deposition characteristics of the spray solution resulting in a more even and uniform spray deposit. ... When allowed by the herbicide label, the product can be used as the sole carrier for herbicides or used with herbicide/water mixtures. For herbicide and water mixtures, use up to 40% of this product by volume in these mixtures". This product was applied at the rate of 64 fl. oz. in 10 gallons of total mixture per acre on 530 acres.

Product Name	EPA # or WA State #	Ingredients	Reg?	RUP	HG Only	Gen. Use
Syl-Coat Silicone Surfactant	2935-12002	Polyether-Polymethylsiloxane-Copolymer and Polyether (100%)	Y			Y

Directions on this label states under Agriculture - **Herbicides, Defoliants and Desiccants:** Use 16 to 48 fl. oz. of SYL-COAT per 100 gallons of spray mixture. Use the higher rate for maximum rain-fastness. Application records show it was applied at the rate of 4 fl. oz. per acre in 10 gallons of solution which is the equivalent of 40 fl. oz. per 100 gallons of solution.

Product Name	EPA # or WA State	Ingredients	Reg?	RUP	HG Only	Gen. Use

	#					
Syl-Tac	2935-00004	Alkyl phenol ethoxylate (0%); Modified vegetable (seed) oil (0%); Polyalkylene oxide (Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether) (0%); Polyethylene glycol esters of tall oil fatty acids (0%); Polysiloxane polyether copolymer (0%);	Y			Y

The label states: "Wetting/Spreading/Penetration: For general wetting, spreading and penetration use 4 fl. oz./acre. ... DO NOT ADD THIS PRODUCT AT A RATE WHICH EXCEEDS 5% OF THE FINISHED SPRAY VOLUME. ... Not for Aquatic use." This product was used on 100 acres at the rate of 6 fl. oz. per acre or 0.47%.

Maps

There are 0 map(s).

Photos

There are 0 photo(s).

Other Evidence

Summary

- Ecology submitted ERTS 661507 on December 14, 2015 to WSDA for follow up on a complaint received from Inessa Pearce, Sultan, WA. Then Inessa Pearce emailed a Letter of Protest to several agencies, including the WSDA Director of Agriculture on December 29, 2015. The Letter of Protest was forwarded to me.
- The Letter of Protest included the tract of land identified as being subject to the ERTS complaint plus an additional 16 units.
- Inessa Pearce was concerned about possible contamination of the watershed due to a herbicide application close to where she lives.
- Very little information was provided with the ERTS. However, by checking various sources of information and comparing that again the information submitted in the ERTS, it was determined that an herbicide application subject to the ERTS complaint took place approximately 0.5 miles from her residence in the time frame of the alleged application subject to her complaint. The additional units brought in by the Letter of Protest were further away from her house. By Ms. Pearce's statement they were behind the ridge and several miles away.
- Applications were made on September 18 through September 21, 2015. Based on application records and Ms. Pearce the weather was acceptable for apply pesticides during the application period.

- All rates for the pesticides applied were within label rates and the site the pesticides were applied to is allowed on the labels.

Attachments