

ERTS Complaint 1 August 2022

Dear WA Environmental Risk Tracking System (ERTS) for Central Washington,

This is a complaint about the inadequacy of the WSDA DNMP investigation of ERTS complaint # 708314 in July and August of 2021.

History

On July 31, 2021, FOTC filed an ERTS complaint saying:

Dear Central WA ERTS: I wish to report a high potential for leaching into the groundwater from Klompe and Frieslandia Dairy at 2371 Stover Road, Grandview, WA 98930. This dairy no longer removes manure from pens and corrals, but now composts the manure where it is deposited. The result is increased leaching, runoff, and harmful emissions. Best management practices stipulate frequent removal of manure from pens and corrals, not composting where the animals eat, sleep and live as part of a dairy nutrient management plan.

As we all know, local studies document leaching from pens and corrals, as well as leaching from compost yards.¹ Tech Note 23 assessment of the manure lagoons at this site² places one lagoon in Category 3C and another in Category 4 – NRCS recommends discontinued use of the WSP for the purposes of waste storage until major repairs or possible replacement of the existing WSP meeting the current NRCS Conservation Practice Standard – 313, Waste Storage Facility and the site would benefit from additional practices to reduce discharge potential in the situation of a structure failure with structure relocation being considered. Klompe and Freislandia does not have an NPDES permit. Given the high likelihood of discharge to groundwater, please consider this a report of discharge and request for corrective action.

The response we received said:

Follow up was conducted with Klompe Frieslandia Dairy LLC at 8:30 am on July 30, 2021 with owner/operators Francisca Vander Meulen and Jacob Veldhuis where we discussed the concerns reported in ERTS 708314.

Attached documents in the reported concern citing pens/corral locations along with nutrient values at depth appear to be from data taken at a different dairy facility not under the ownership of the Veldhuis'. Further investigation and follow up will be conducted into the origins of these documents.

Additional follow up will be conducted next week including verification of the Dairy's Tech Note 23 assessments completed in 2015 and 2017, as well as NRCS Practice Standards listed in their current Nutrient Management Plan.

And on 8/17/2021

Additional follow up to this ERTS was conducted on August 4, 2021 where WSDA DNMP Inspector Kristina Gibson reviewed the Dairy's Nutrient Management Plan and conducted an investigation of the facility. According to the Dairy's Nutrient Management Plan, all of the Dairy's lagoons were designed to NRCS standards and specifications. Because this plan was written after 2008, lagoons typically approved after this time that do not have synthetic (i.e., earthen) liners are designed to achieve a permeability rating of 1×10^{-7} cm/sec. There are several discrepancies on the Tech Note 23 evaluations concluded at the dairy in 2015 that I am in the process of looking into further. All further follow up will be conducted directly with the dairy and the ERTS can be considered closed.

Specific Inadequacies

I will go through the complaint and response line by line to explain why the response was inadequate:

Initial Complaint

I wish to report a high potential for leaching into the groundwater from Klompe and Frieslandia Dairy at 2371 Stover Road, Grandview, WA 98930.

Citizens are not required to prove that discharge occurs. Citizens are asked to report a suspicion of discharge which is what we did. Citizens do not have the resources to go beneath the ground and trace pollution from a source to the aquifer. Ecology and WSDA have the resources, the authority and duty to investigate.

I wish to report a high potential for leaching into the groundwater from Klompe and Frieslandia Dairy at 2371 Stover Road, Grandview, WA 98930. This dairy no longer removes manure from pens and corrals, but now composts the manure where it is deposited.

This practice adds stress and adverse health impacts for the cows. This is animal abuse. This practice concentrates leachate, runoff, and air emissions in a small area. FOTC has not seen this practice on any other dairies. We are concerned that tacit approval of manure composting in animal pens will be interpreted to mean that this is an accepted "good agricultural practice" in the LYV as referenced in the WA Right to Farm Act, RCW 7.48.305 which says:

(1) Notwithstanding any other provision of this chapter, agricultural activities conducted on farmland and forest practices, if consistent with good agricultural and forest practices and established prior to surrounding nonagricultural and nonforestry activities, are presumed to be reasonable and shall not be found to constitute a nuisance unless the activity or practice has a substantial adverse effect on public health and safety.

(2) Agricultural activities and forest practices undertaken in conformity with all applicable laws and rules are presumed to be good agricultural and forest practices not

adversely affecting the public health and safety for purposes of this section and RCW 7.48.300. An agricultural activity that is in conformity with such laws and rules shall not be restricted as to the hours of the day or day or days of the week during which it may be conducted.

The result is increased leaching, runoff, and harmful emissions. Best management practices (BMPs) stipulate frequent removal of manure from pens and corrals, not storing and composting manure where the animals eat, sleep and live.

To the best of our knowledge, there are no approved BMPs for dairies. However, in 2014 the Yakima Regional Clean Air Agency (YRCAA), in collaboration with dairy experts, listed BMPs that agency found useful for addressing air pollution.³ Two of those BMPs are:

Remove and/or Spread (Harrow) Manure Frequently (NH₃, PM) *Ammonia emissions from open drylot pens are due to infrequent manure removal. There are two types of in-pen manure management: (i) spreading or harrowing, and (ii) complete manure removal. In general, manure in drylot pens should be completely cleaned out every one to three months. The reduction in the quantity of manure results in less ammonia volatilization and also minimizes PM (dust) production from animal hoof action on the loose manure pack. More frequent (monthly, weekly) removal of manure from areas where manure deposition is highest (i.e., sleeping areas, feed bunks) is desirable. Installation of concrete alleyways adjacent to feedbunks aids in daily collection of manure and further reduces ammonia volatilization potential. The daily harrowing of pens should be practiced to spread out the manure pack, but should only be done during times of the day when PM production will not be an issue, such as the early morning.*

And for Composting Areas:

Properly Manage the Composting of Solid Manure (H₂S, Odor, PM, CH₄) *The effectiveness of the composting process is highly dependent on good management of pile characteristics including temperature, moisture, carbon to nitrogen ratio (C:N), and aeration. Low temperature, high moisture, and low aeration will lead to anaerobic conditions inside the manure pile and increase odor, H₂S, and CH₄ emissions. A shift from anaerobic to aerobic process can cause a nitrification/denitrification cycle that can increase N₂O losses. Low C:N (below 12:1), high temperature, and high aeration of the compost pile will increase NH₃ volatilization, which can be up to 90% total N loss under these conditions (12). Low moisture will increase PM emissions. A C:N above 12:1, and optimally around 30:1, will have reduced NH₃ emissions, while still supporting an active composting process.*

As we all know, local studies document leaching from pens and corrals, as well as leaching from compost yards.

FOTC has attached copies of deep soil sampling beneath pens, corrals, and compost area in the Lower Yakima Valley. We did not say that these studies came from Klompe/Frieslandia. We

submitted the studies to show that leaching from these areas occurs.¹ There are more studies if WSDA needs further proof that this happens in the LYV.

Tech Note 23 assessment of the manure lagoons at this site² places one lagoon in Category 3C and another in Category 4 – NRCS recommends discontinued use of the WSP for the purposes of waste storage until major repairs or possible replacement of the existing WSP meeting the current NRCS Conservation Practice Standard – 313, Waste Storage Facility and the site would benefit from additional practices to reduce discharge potential in the situation of a structure failure with structure relocation being considered.

WSDA apparently believes that, because the 2015 – 2017 lagoon assessments in the LYV contained flawed information, the studies do not demonstrate a significant potential to pollute. FOTC disagrees. Just because some of the data is incorrect, this does not negate all the data.

Klompe and Freislandia does not have an NPDES permit. Given the high likelihood of discharge to groundwater, please consider this a report of discharge and request for corrective action.

One of the strongest motivators for obtaining an NPDES permit is documentation of a discharge. NPDES permits are among the strongest tools available to state and federal agencies as they attempt to enforce the Clean Water Act.

ERTS Response

Follow up was conducted with Klompe Frieslandia Dairy LLC at 8:30 am on July 30, 2021 with owner/operators Francisca Vander Meulen and Jacob Veldhuis where we discussed the concerns reported in ERTS 708314.

The inspector meets with the alleged polluters but does not talk with the victims of air and water pollution. In fact, RCW 90.64.030 requires: “Within twenty days of receiving a written complaint, a copy of the findings shall be provided to the dairy producer subject to the complaint, and to the complainant if the person gave his or her name and address to the department at the time the complaint was filed.” The inspector did not send a report to the complainant for ERTS 708314.

Attached documents in the reported concern citing pens/corral locations along with nutrient values at depth appear to be from data taken at a different dairy facility not under the ownership of the Veldhuis’. Further investigation and follow up will be conducted into the origins of these documents.

As noted above, FOTC did not say that these studies came from Klompe/Frieslandia. The reports were attached to show that pens, corrals, and compost areas in the LYV do leach large quantities of pollutants to the underlying soils and aquifers.¹

Additional follow up will be conducted next week including verification of the Dairy’s Tech Note 23 assessments completed in 2015 and 2017, as well as NRCS Practice Standards listed in their current Nutrient Management Plan.

FOTC has not seen the report of DNMP follow up. Has Ecology seen these reports?

Which NRCS Practice Standards are included in the Klompe/Frieslandia NMPs? Who decides whether the dairies follow these standards and whether the cited standards are protective of groundwater? WA dairies are not required to follow their nutrient management plans.⁴

According to the Clean Water Act, citizens are entitled to the information we need to secure enforcement of the law.

Additional follow up to this ERTS was conducted on August 4, 2021 where WSDA DNMP Inspector Kristina Gibson reviewed the Dairy's Nutrient Management Plan and conducted an investigation of the facility.

Did Inspector Gibson take soil samples or water samples? Did she address management of runoff from the pens and compost areas? How closely did she look for erosion of lagoon sidewalls? How often are the lagoons inspected? How much time did Inspector Gibson spend inspecting the facility?

According to the Dairy's Nutrient Management Plan, all of the Dairy's lagoons were designed to NRCS standards and specifications.

The information FOTC has received from Ecology says that the date of construction for the Klompe/Frieslandia lagoons is unknown. Date of construction makes a difference. Standards changed in 1994 and again in 2003.⁷ If these lagoons were constructed prior to 1994 they leach large quantities of pollutants to the aquifer. RCW 90.48 states that it is illegal to discharge pollutants to waters of the state.

Because this plan was written after 2008, lagoons typically approved after this time that do not have synthetic (i.e., earthen) liners are designed to achieve a permeability rating of 1×10^{-7} cm/sec.

The fact that a plan was approved after 2008 does not mean that the lagoons were constructed after 2008.

"Synthetic" does not mean "Earthen" as Ms. Gibson states in her report.

A permeability rating means nothing if there is no measurement of clay liner thickness. The data FOTC received says the liner thickness for these lagoons is unknown.

Clay lined lagoons leak at least 924 gallons per acre per day when the permeability is 1×10^{-7} cm/sec., liner thickness is one foot, and the lagoon has a depth of nine feet.^{5,6}

WSDA has provided a response that dances around and does not address this issue.

There are several discrepancies on the Tech Note 23 evaluations concluded at the dairy in 2015 that I am in the process of looking into further. All further follow up will be conducted directly with the dairy and the ERTS can be considered closed.

It would be very helpful if WSDA were to provide FOTC with the DNMP investigation of Tech Note 23 discrepancies. The WA State Dept. of Agriculture has serious reservations about Tech Note 23 assessments. On Dec. 17, 2021, WSDA Deputy Director Patrick Capper told FOTC⁸:

DNMP has communicated concerns over their use of the TN23 assessment tool and the accuracy of the information contained within to Friends of Toppenish Creek, within WSDA, the Washington State Department of Ecology's (Ecology) Concentrated Animal Feeding Operation section, and with Washington Natural Resources Conservation Services (NRCS).

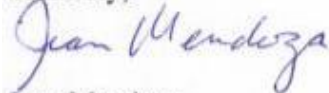
Meanwhile, the WA State Dept. of Ecology has found Tech Note 23 sufficiently robust to include it in their 2022 draft NPDES Permit for CAFOs.⁹ The U.S. EPA has found Tech Note 23 sufficiently robust to include it in their NPDES Permit for CAFOs in the State of Idaho.¹⁰

This is not good government.

FOTC believes that closing this case before all the data has been gathered is inadequate. Premature closure of the case provides an excuse not to require actions that could reduce discharge from Klompe/Frieslandia manure lagoons. This also obstructs any Ecology efforts to require Klompe/Frieslandia to obtain an NPDES CAFO permit.

Please provide a written response to this ERTS complaint at your earliest convenience.

Sincerely,



Jean Mendoza

Executive Director, Friends of Toppenish Creek
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White Swan, WA 98952

¹ Attachments 1, 2, & 3

² Attachment 4 – Tech Note 23 spreadsheet for Yakima County. The WSDA states that some of this data is incorrect, but the agency has not provided corrections.

³ Yakima Regional Clean Air Agency. 2018 YRCAA Resource Guide and Best Management Practices for Dairy Operations. Available at https://www.yakimacleanair.org/site/files/file_manager/page/shared/Resource%20Guide%20for%20BMP%20for%20Dairy%20Operation%20Aug18.pdf

⁴ WA dairies are required to have approved nutrient management plans on site. WA dairies are not required to follow their NMPs. See Implementation of Nutrient Management Training Program for Farmers and Manure Management Program Review, page 6. Available at https://app.leg.wa.gov/ReportsToTheLegislature/Home/GetPDF?fileName=634-DNMP2017LegReport_b2479af1-2fc9-4218-8200-1a0118e3063b.pdf

⁵ Ninth Circuit Court. Expert Report of David Erickson. See especially analysis for Lagoon 2 on page 44. Available at <http://www.charlietebbutt.com/files/CP/237-3%20-%20Expert%20Report%20of%20%20David%20Erickson.pdf>

⁶ NRCS Agricultural Waste Management Field Handbook. Appendix D. Available at <https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=31529.wba>

⁷ Tech Note 23. Available at <https://ecology.wa.gov/DOE/files/a0/a0a6c01a-af2c-428b-83ba-a30f10d8e643.pdf>

⁸ Letter from WSDA to FOTC, December 17, 2021 – Attachment 5.

⁹ WA State Dept. of Ecology, Draft NPDES General Permit for CAFOs. S7.C. Waste Storage Structure Assessment on page 42. Available at https://fortress.wa.gov/ecy/ezshare/wq/permits/CAFO_Draft-CombinedPermit-2022.pdf

¹⁰ U.S. Environmental Protection Agency - *Authorization to Discharge under the National Pollutant Discharge Elimination System For Concentrated Animal Feeding Operations (CAFOs) in the State of Idaho*. page 73/201. Available at <https://www.epa.gov/sites/default/files/2020-05/documents/r10-npdes-idaho-cafo-gp-idg010000-final-permit-2020.pdf>