



Friends of Toppenish Creek

July 4, 2022

Chelsea Morris
Jeff Killelea
Washington State Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

Dear Ms. Morris and Mr. Killelea:

Please consider this letter a formal request from the Friends of Toppenish Creek (FOTC). We ask the WA State Dept. of Ecology (Ecology) to immediately reconsider your choice of Natural Resources Conservation Service (NRCS) Tech Note 23 as the means of regulating leakage from Waste Storage Ponds (WSPs) in Section S7.C.2 of the 2022 draft NPDES permit for CAFOs.

This approach creates a loophole that will allow anyone with reasonable intelligence to, innocently or intentionally, frustrate enforcement efforts. It may violate the Clean Water Act because it creates a path by which a CAFO with a WSP that leaks at rates more than 10^{-6} cm/sec can be permitted.

Ask yourselves whether Tech Note 23 assessments would have prevented leakage from Lagoon No.3 on the H&S Bosma Dairy where testing at abandonment found soil nitrate levels of 30.4, 45.6, 113.1, 6.9, 0.7, and 15.4 mg/kg at ten feet - laterally and beneath the lagoon bottom.¹

Section S7.C.2. of Ecology's draft 2022 NPDES permit for CAFOs requires permitted CAFOs with WSPs to complete Tech Note 23 inspections within two years of obtaining a permit. If the Tech Note 23 assessment places a WSP in a risk category that requires repairs, a permitted CAFO must stop using the WSP until the repairs have been completed and approved by Ecology.

Tech Note 23 assessments are widely accepted for the purpose of assessing site and structure risk for WSPs, although the NRCS cautions that these guidelines do not provide regulatory certainty.

This Technical Note prescribes a consistent review and assessment process for assigning one of four rating categories and subcategories to a waste storage pond (WSP)

according to observed factors that may contribute to the risk of contamination of water resources.

The NRCS assessment should not be construed to provide ANY regulatory certainty from State regulatory agencies. State of Washington laws and rules prohibit pollution of waters of the state, including ground water. The state requires a permit for discharge of wastewater to waters of the state. This document does not supersede these requirements.²

There are two confounding problems, one with the Tech Note 23 site risk assessment, and one with the Tech Note 23 structure risk assessment:

1. The WA State Department of Agriculture (WSDA), the agency that developed the aquifer susceptibility map used in the Tech Note 23 site risk calculations, no longer stands behind the validity of that map.³ The WSDA states that their staff will not perform Tech Note 23 assessments and that:

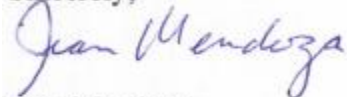
the TN23 can be a valuable risk assessment and prioritization tool for the CAFO permit, but because it does not measure seepage, it is not the right tool for determining compliance.³

2. All other factors being equal, the Tech Note 23 matrix for risk assessment gives a WSP built to outdated standards the same structure risk rating as a WSP built to current standards.⁴ For example, a WSP built in 1990 could meet standards with a six inch clay liner. Clay was only characterized as lean or fat. Today a WSP meets standards with a twelve inch liner that has a permeability rate less than 10^{-6} cm/sec.⁵

A CAFO can meet requirements in Section S7.C.2 when WSPs fall into Tech Note 23 risk categories 1a or 1b, but still not meet requirements in Section S4.C.1 – maximum water discharge less than 10^{-6} cm/sec. Over time NRCS guidelines have become more stringent as research finds greater evidence of WSP leakage, but Tech Note 23 does not require upgrades to the higher standards.⁶

We respectfully ask Ecology to address and resolve this issue before proceeding further with listening sessions and the comment period for the 2022 NPDES permit for CAFOs.

Sincerely,



Jean Mendoza

Executive Director, Friends of Toppenish Creek
3142 Signal Peak Road
White Swan, WA 98952

¹ H&S Bosma Dairy Lagoon No. 3 Abandonment Plan. 2022. Available at [Bosma Lagoon 3 Abandonment Plan 20220118.pdf](#)

² Natural Resource Conservation Service Tech Note 23 for WA State. Available at <https://ecology.wa.gov/DOE/files/a0/a0a6c01a-af2c-428b-83ba-a30f10d8e643.pdf>

³ Attached letter from WSDA Deputy Director Patrick Capper to Friends of Toppenish Creek

⁴ Practice Standard Compliance Report Form (PSCRF), page 22/42, and WSP Structure Assessment form, page 26/42. NRCS Tech Note 23 for WA State. Page 32/42 Available at <https://ecology.wa.gov/DOE/files/a0/a0a6c01a-af2c-428b-83ba-a30f10d8e643.pdf>

⁵ This does not agree with guidelines in the NRCS Agricultural Waste Handbook, Chapter 10, Appendix 10D, that require thicker liners for deeper lagoons in accordance with Darcy's Law. See page 172

<https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=31529.wba>

⁶ WSP Practice Standard Criteria Reference Documents. NRCS Tech Note 23 for WA State. Page 32/42 Available at <https://ecology.wa.gov/DOE/files/a0/a0a6c01a-af2c-428b-83ba-a30f10d8e643.pdf>



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Ms. Jean Mendoza
Executive Director, Friends of Toppenish Creek
3142 Signal Peak Road
White Swan, WA 98952

December 17, 2021

Dear Ms. Mendoza,

Thank you for your letter on December 8, 2021 expressing concern over the accuracy of the lagoon and waste storage pond (WSP) assessments that you requested on November 6, 2021 through a public disclosure request. The Washington State Department of Agriculture (WSDA) submitted all Technical Note 23 assessments (TN23) for the Klompe/Frieslandia dairies.

When your request was fulfilled, the following narrative accompanied the records you requested:

"WSDA Dairy Nutrient Management Program has minimal confidence in the accuracy of the attached reports. Since initial assessments were conducted in 2015, multiple issues with the aquifer susceptibility rating used as part of the risk analysis, as well as finding accurate information on depth to groundwater and seasonal high groundwater. At this point, WSDA does not consider the information contained in the attached reports useful, based on the inaccurate information, and the fact that the assessments were not conducted or completed by a Natural Resources Conservation Service (NRCS) engineer, or someone with NRCS job approval authority."

As you have identified in your December 8, 2021 letter, the information in the TN23s that you received is inaccurate. You received multiple copies of TN23s with the same evaluation date because we tried to correct quantitative information where we had identified inaccuracies. However, not all data has been corrected due to our limited access to some quantitative information. We also lack authority to complete and sign the final TN23s which requires the signature of a NRCS engineer, or someone with NRCS job approval.

In August 2021, WSDA's Dairy Nutrient Management Program (DNMP) communicated directly with you via email after you made an inquiry about the accuracy of the TN23 assessments conducted by DNMP at the Klompe/Frieslandia dairies. Below is a summary of that email:

- Only permitted CAFOs are required to have a TN23 assessment completed.
- DNMP cannot complete assessments as they require a NRCS engineer or someone with NRCS job approval authority to complete and sign the TN23 assessments.
- TN23 is not intended to be a regulatory tool for making a compliance determination.

- DNMP acknowledged that there were errors in the TN23 assessment conducted by our staff which resulted in inaccurate risk categories assigned to the WSPs associated with the Klompe/Frieslandia dairies.
- DNMP intended to cease conducting TN23 assessments based on limited access to accurate data to complete the quantitative portion of the assessment, and the lack of authority to complete the TN23.

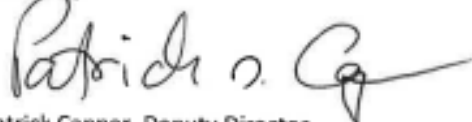
DNMP has communicated concerns over their use of the TN23 assessment tool and the accuracy of the information contained within to Friends of Toppenish Creek, within WSDA, the Washington State Department of Ecology's (Ecology) Concentrated Animal Feeding Operation section, and with Washington Natural Resources Conservation Services (NRCS). After discussions with multiple agencies, DNMP determined that they would no longer conduct TN23s due to lack of accurate information available necessary to conduct an accurate assessment, as well as the lack of job approval authority within the team.

In 2017, Ecology incorporated TN23 into the Concentrated Animal Feeding Operation (CAFO) permit, requiring a TN23 assessment to be conducted on all WSPs at facilities within two years of receiving a CAFO permit. Initially, DNMP conducted some of the TN23s for permitted facilities but those TN23s were not completed by someone with job approval authority from NRCS. Some permitted facilities chose to have licensed engineers conduct the TN23s for their WSPs. For a list of TN23s completed for CAFO permitted facilities, use Ecology's Water Quality Permitting and Reporting Information System: <https://apps.ecology.wa.gov/paris/PermitLookup.aspx>. To date, only permitted CAFOs with one or more WSPs are required to have a TN23 assessment conducted.

The TN23 document states on its cover page, "The NRCS assessment should not be construed to provide **ANY** regulatory certainty from State regulatory agencies." When DNMP began use of the TN23, it was with the intent to provide technical assistance to dairy producers, and to identify and prioritize WSPs that may require further evaluation. Since implementing this work in the Lower Yakima Valley, DNMP has determined that the TN23 evaluation tool is best conducted by NRCS, and when conducted by DNMP, its use for determining risk has limited value. As such, DNMP does not intend to conduct TN23 assessments itself. If completed by a licensed engineer, the TN23 can be a valuable risk assessment and prioritization tool for the CAFO permit, but because it does not measure seepage, it is not the right tool for determining compliance. For the purposes of making a compliance determination, engineering evaluations including the TN23 should be conducted by a licensed engineer. Regulatory evaluations of WSPs should limit the amount of subjective information used in a compliance determination and ensure that data is accurate and of high quality.

As discussed above, DNMP does not have access to essential information, nor the authority to complete the TN23 WSP Assessments.

Sincerely,



Patrick Capper, Deputy Director
Washington State Department of Agriculture