

Current environmental issues and a look into 2022

Alan Hahn for *Progressive Dairy*

AT A GLANCE

Dairy producers face a number of ongoing and emerging environmental regulatory issues. Here's a summary of current topics and the potential path they'll take in 2022.

Agriculture is increasingly facing more environmental pressure from regulators, activist groups and private citizens. As an environmental consulting firm, Dragun Corporation has worked with agriculture for more than 30 years, helping address complex issues including nitrates in groundwater, PFAS contamination, groundwater supply and more.

PFAS contamination

Farms in the eastern and southern U.S. have been in the news due to per- and polyfluoroalkyl substances (PFAS) contamination.

The farms were impacted (groundwater and/or soil) in one of two ways. One is from the use of firefighting foams used at military bases. These foams contained PFAS –

and when sprayed, the PFAS on the surface reached the groundwater.

The other common way farms have been impacted by PFAS is from municipal or industrial biosolids that were land applied to the farm fields. Municipal biosolids can become impacted with PFAS from companies that use PFAS and discharge their wastewater to the municipality. Biosolids from industries that use PFAS in their manufacturing, such as the paper industry, can also be a source of PFAS when spread on farm fields.

PFAS-impacted groundwater at farms can be devastating. For example, groundwater containing PFAS shouldn't be used as a drinking water supply for people or livestock. Animals that may have consumed the groundwater could now be a liability. Farms may not be able to sell milk from cows or meat from animals that ingested the water. Further, PFAS can be transferred to crops that uptake PFAS-impacted water.

The width and breadth of how PFAS have affected human health and the environment is still not fully understood. We know they are found practically everywhere (including in the blood of many if not most humans) on the planet; however, the EPA has yet to establish science-based cleanup criteria.

What to expect in 2022

In late 2021, the Biden administration established the PFAS Strategic Roadmap. The only mention of agriculture in the "Roadmap" was a plan to finalize a risk assessment for two PFAS compounds for biosolids applied to farm fields. That assessment isn't expected until winter 2024. With respect to your farm, keep a pulse on state and local



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activity as well as plans by activists. Additional pressure may come from processors who want to ensure milk provided to them does not have PFAS.

Environmental compliance

In the fall of 2021, there was a six-figure fine at a farm in the Midwest for failure to comply with state environmental regulations. Within weeks of that fine, there was another enforcement action in a different state for violation of the concentrated animal feeding operation (CAFO) permit. Just a year prior, the U.S. Department of Justice announced a record seven-figure settlement at a CAFO.

Several environmental statutes can potentially apply to farms. These include the National Pollutant Discharge Elimination System (NPDES) program and the Spill Prevention Control and Countermeasures (SPCC) Rules under the Clean Water Act and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). There are several factors that determine which regulations will apply. In general, the larger the farm (especially for livestock farms), the more likely environmental regulations will apply.

There is also ongoing discussion regarding the application of the Clean Air Act on larger farms. In particular, there is concern about ammonia and particulate emissions (dust and airborne debris) from some farms.

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As with most environmental regulations, states with delegated regulatory authority are the more likely source of inspections and enforcement.

Fines for non-compliance can be a few thousand dollars to millions of dollars.

What to expect in 2022

On Oct. 1, 2021, the EPA released its 2022-26 Draft Strategic Plan. Goal three of seven is "Enforce Environmental Laws and Ensure Compliance." This, combined with the additional 500 employees the EPA has added under the Biden administration, may mean a greater focus on environmental compliance.

That said, environmental enforcement activity is more likely to come from local or state regulators. The most likely source of enforcement originates from citizen complaints. Maintaining good relations with your neighbors is still the most effective way to avoid visits by regulators.

Remotely sensing CAFO violations

Large farms may be under additional watchful eyes by way of remote sensing. This, according to a pre-print of an article in *International Journal of Applied Earth Observation and Geoinformation*, the authors state, "Advances in remote sensing and computer vision ... have the potential to augment compliance monitoring by detecting early warning signs of noncompliance."

They also state, "We demonstrate a process for rapid identification of significant structural expansion using Planet's 3 m/pixel satellite imagery products and focusing on concentrated animal feeding operations (CAFOs) in the U.S. as a test case. Unpermitted building expansion has been a particular challenge with CAFOs, which pose significant health and environmental risks."

The Biden administration has provided every indication it will focus on methane from the oil and gas industry. Using remote sensing, will it begin to monitor methane from CAFOs?

What to expect in 2022

While this is an interesting development, it would be surprising to see the federal government using remote sensing to enforce at CAFOs. However, the Biden administration is keenly focused on reducing greenhouse gases (GHGs), including methane. Tackling climate change is the number one goal in the administration's draft strategic plan. We would not expect this to get legs in the immediate future.

WOTUS

The other development that

is important for farmers is the redefining of what is and is not federally regulated waters. The definition of Waters of the United States (WOTUS) has been debated for decades. Which waterways are included in the definition can restrict farm operations near intermittent streams, ditches and wetlands. The rule developed under the Trump administration, the Navigable Water Protection Rule (NWPR), was vacated by the courts in the summer of 2021. A new WOTUS rule was


proposed in December 2021 and will be an important topic as we move through 2022.

Possibly complicating the WOTUS issue was a late-January decision by the U.S. Supreme Court to hear *Sackett v EPA*, an important case that may decide the proper test for determining whether wetlands are waters of the United States. Further, this decision may come prior to the new WOTUS rule by the Biden Administration.

Finally, environmental protection,

important for everyone, is part science and part politics. In 2022, we have plenty of politics (mid-term elections, COVID recovery, concerns over inflation and more) that may factor into local, state and federal decisions. ↪

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