

Five Valley Dairies Agree to Reduce Nitrate Levels
David Lester, Yakima Herald Republic, March 6, 2013

GRANGER, Wash. — Five Yakima Valley dairies located north of Granger have agreed to take a number of steps to reduce nitrate levels in groundwater under a legally binding agreement with the federal government that also requires them to assure their neighbors have safe drinking water.

Environmental Protection Agency officials announced the agreement Wednesday, concluding months of negotiations that began after an agency report in September labeled the dairies likely sources of nitrate contamination in private drinking water wells.

“We think this is a very significant set of steps that have been agreed to,” said Dennis McLerran, EPA regional administrator in Seattle. “When you look at all the things identified in the work plan that will occur, we will see a difference with relation to nitrate contamination.”

The agreement also mandates the dairies, holding thousands of cattle, to modify their practices on the handling of nitrogen and monitor groundwater over an eight-year period to gauge the effectiveness of their efforts.

Dairy operators will test the wells of all private residences within a mile downhill of their facilities and provide alternate water sources for those that exceed the federal drinking water standard of 10 parts per million of nitrate.

Those alternate sources could include filtration systems, bottled water or a new well, EPA officials said.

The agency said the total number of wells that could be involved is uncertain. All costs associated with agreement will be borne by the dairies, but there has been no estimate of the possible cost.

Outside the agreement, federal officials said they want to work with the state Departments of Agriculture and Ecology to strengthen the existing dairy management program on offsite movement of manure and better verify that manure is being applied to the ground as fertilizer at proper rates.

Beyond the group of affected dairies, the agency said the Lower Valley Groundwater Management Area, created to work on solutions to groundwater contamination, could provide the comprehensive solution to reducing pollution.

The agreement, a consent order that provides for enforcement action if the dairies fail to comply, involves five dairies that are operated by three families. They are Cow Palace Dairy, George DeRuyter and Son Dairy, D&A Dairy, Liberty Dairy and H&S Bosma Dairy.

The dairies issued a statement through a spokesman who said the agreement provides long-term certainty for their futures coupled with strong measures to protect groundwater.

“We will continue to work with EPA to identify ways that we can scientifically evaluate the sources of nitrate in the groundwater,” according to the statement issued by Paul Queary of the Seattle public relations firm Strategies 360. “We will live by the science.”

Critics of dairy practices and the way the facilities are regulated said the agreement only reinforces the use of failed strategies that will not solve the contamination and will continue to put Lower Valley residents at risk, according to Charlie Tebbutt, a Eugene, Ore., environmental attorney.

Tebbutt is representing a Lower Valley group, Community Association for Restoration of the Environment, and the Washington, D.C.-based Center for Food Safety, in a separate lawsuit against the same dairies that signed the consent agreement with the EPA. He said the agreement will continue to allow manure lagoons to leak into the ground, a problem that can only be solved by lining the giant pools.

Tebbutt also said guidelines in the agreement for the presence of nitrate contaminants in the soil are not science-based and won't remediate existing contamination.

“If any other industry were doing what this industry is doing, they would be required to remediate and if they couldn't prove they would stop contaminating, they would be shut down,” Tebbutt said. “The dairy industry is being given a free pass to continue to contaminate.”

Regulators see it differently.

Dan Newhouse of Sunnyside, director of the state Department of Agriculture, said in a news release that manure management issues are critical “for the community, the environment and the dairy industry. We look forward to working with the EPA, the dairy industry and other affected parties as we strengthen our efforts in crafting long-term solutions to the challenges we face.”

Ecology Director Maia Bellon applauded the consent decree.

“We're encouraged that these dairies have agreed to move forward with important best management practices. We hope other farm operations will examine their practices as well. And we know there is more work to do.”

Jay Gordon, executive director of the Washington State Dairy Federation, said nitrates in groundwater is a community-wide problem that will require all parties, including dairies, to find solutions.

“Between us and the EPA, we will have to agree to disagree on the quality of the science, but we don't disagree on the problem,” Gordon said. “There is too much nitrate in groundwater. We as a community, dairies included, need to step up. But we need good information.”

The federation was not involved directly in the agreement between EPA and the dairies.

Excessive nitrates can harm infants and those with compromised immune systems. Presence of nitrates, which can come from a variety of sources, can be an indicator of other contaminants, such as bacteria and pesticides.

Some 24,000 rural residents in the Lower Valley, many of them low-income, rely on private wells for drinking water.

The problem of nitrate contamination, a topic that has been well-known for years but not dealt with, was highlighted in a 2008 Yakima Herald-Republic series. "Hidden Wells, Dirty Water" detailed how even though up to one in five of those wells was contaminated, government agencies charged with addressing the problem long failed to act.

As a result of the newspaper's series, the EPA began looking into the problem. Well water tests showed that 20 percent of 331 residential wells had nitrate levels above the federal safe drinking water standard.

The agency's September report singled out the dairies covered by the agreement where manure lagoons are estimated to have leaked millions of gallons of manure into the ground. Dairy representatives initially disputed the findings, questioning the validity of the conclusions.

McLerran said the agency provided additional well monitoring data that bolstered the agency's case. While some contamination was found uphill from the dairies, which could be coming from other sources, most of it was found downhill, indicating nitrates are flowing into the groundwater from their operations. That data was helpful in reaching the agreement announced Wednesday, he said.

McLerran called the agreement good news for addressing contamination in the Yakima Valley in a cooperative way.

"By working constructively with us in this local situation, the dairies have committed to protect drinking water and we have committed to collaborate on practices that keep people safe and farms in business," a news release quoted McLerran as saying.

In addition to assuring safe drinking water, the agreement requires the dairies take a number of steps:

- Drill additional monitoring wells for groundwater sampling and analysis to evaluate if nitrates are being controlled. Sampling will be conducted for eight years. Results will determine if monitoring can be halted or if other steps are needed
- Apply animal waste and synthetic fertilizer in accordance with standards.
- Consider planting crops with longer root zones, which would absorb more nitrates as nutrients and send less into the ground.

- Regularly test soil samples for the presence of nitrates at acceptable levels.
- Institute an irrigation water management plan to measure the amount of water applied and installation of sensors to minimize water movement below the root zone.
- Reduce nitrate contributions from silage storage.
- Submit a report documenting that manure lagoons meet standards for leakage.
- Minimize ponding of liquid in cow pens to reduce infiltration of nitrogen-rich water.
- Avoid roof runoff ponding on the ground.
- Eliminate all furrow irrigation within two years.
- Manage solid animal waste to minimize liquid leaching into the ground.

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