

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue, Suite 155 Seattle, WA 98101

ENFORCEMENT & COMPLIANCE ASSURANCE DIVISION

Reply To: 20-C04

RETURN RECEIPT REQUESTED

Ms. Rachael Banks, MPA Public Health Director Oregon Health Authority 500 Summer Street Northeast, E-20 Salem, Oregon 97301

Ms. Leah Feldon Deputy Director Oregon Department of Environmental Quality 4026 Fairview Industrial Drive Southeast Salem, Oregon 97302

Ms. Lauren Henderson Deputy Director Oregon Department of Agriculture 635 Capital Street Northeast Salem, Oregon 97301

Re: January 16, 2020, Petition to EPA for Emergency Action Pursuant to Safe Drinking Water Act Section 1431 to Address Nitrate in LUBGWMA in North Central Oregon

Dear Ms. Banks, Ms. Feldon and Ms. Henderson:

The U.S. Environmental Protection Agency (EPA or "Agency") has reviewed your letter dated December 22, 2021, and its enclosed *State of Oregon Workplan: Protecting Public Health from Nitrate Exposure in the Lower Umatilla Basin Ground Water Management Area* ("Workplan"). While Region 10 appreciates your willingness to detail Oregon's plans to address nitrate contamination in groundwater in the Lower Umatilla Basin (LUB), EPA remains concerned about the adequacy and timing of such plans, as noted below. The purpose of this letter is to respond to the Workplan and identify next steps as EPA assesses the situation and determines its response to the LUB petition for emergency action pursuant to the Safe Drinking Water Act (SDWA) Section 1431, which the Agency received from several concerned community groups and nongovernmental organizations in January 2020. This letter addresses Workplan components to be implemented by each relevant state agency, namely the Oregon Health Authority (OHA), Oregon Department of Environmental Quality (ODEQ) and Oregon Department of Agriculture (ODA).

OHA Workplan Components

EPA's immediate priority is to protect human health in the LUB by ensuring that all residents impacted or potentially impacted by nitrate contamination are (1) identified; (2) provided notice in all applicable languages regarding their potential exposure to elevated nitrate concentration and information regarding the associated health risks; and (3) provided the opportunity to obtain alternative drinking water until nitrate contamination in groundwater falls below 10 mg/L, the maximum contaminant level (MCL). Based on EPA's review of the OHA Workplan components, Oregon's and EPA's immediate priorities appear aligned. However, as explained below, EPA urges Oregon to accelerate its funding and implementation of the Workplan so that outreach to residents and access to alternative water are provided as soon as possible.

The Workplan explains generally that OHA intends to implement a multi-faceted program to address immediate health risks. First, OHA will conduct an outreach and education program to provide information regarding nitrate contamination to low-income households and will conduct a detailed hazard assessment of nitrate data and demographic analysis of impacted communities. Additionally, OHA will provide opportunities for residents to test drinking water from residential wells. Finally, for well users with elevated nitrate concentrations, OHA intends to provide alternative drinking water.

Although EPA supports this general framework for identifying impacted residents, conducting outreach and providing safe drinking water where necessary, OHA should further develop its details and expedite its funding and implementation. Under the current Workplan, OHA estimates that LUB residents with contaminated drinking water will not begin receiving alternative water until the fall or winter of 2023. This timeline is too long given the information available regarding nitrate contamination and its potential risks to LUB residents. The Workplan acknowledges that limited resources are allocated to addressing domestic well concerns in Oregon and additional funding could help to expedite the proposed timeline, resulting in the provision of safe water to LUB residents sooner. Nitrate is an acute contaminant, meaning a single exposure can adversely impact an individual's health. Accordingly, the proposed timeline is inadequately protective of human health.

Section 1431 of the SDWA, 42 U.S.C. § 300i, authorizes EPA emergency action upon receipt of information that a contaminant in an underground source of drinking water (USDW) may present an imminent and substantial endangerment and that appropriate State and local authorities have not acted to protect human health. Having approved Oregon as the primary authority to implement and enforce the SDWA, EPA expects the state to respond urgently and in a manner sufficient to protect residents from contaminants in public water systems and USDWs. Although OHA is engaged in certain on-going efforts to address public exposure to nitrate-contaminated drinking water from USDWs and EPA recognizes certain local efforts, like those in Morrow County, to conduct drinking water testing, EPA remains concerned that LUB residents are currently exposed to contaminated drinking water and may experience adverse health impacts now. EPA aims to find a solution to satisfy the immediate priority, as identified above, on a faster schedule than that proposed in Oregon's Workplan.

ODEQ and **ODA** Workplan Components

EPA is hopeful that OHA's efforts to provide safe water to impacted LUB residents will ultimately be successful. However, even after immediate access to drinking water is secured, EPA recognizes that the underlying problem – nitrate-contaminated groundwater – will continue to present a risk to human health and the environment. The Workplan identifies ODEQ's and ODA's current efforts to mitigate sources of nitrate to groundwater, indicating that Oregon shares EPA's goal to lower nitrate concentrations in groundwater. For example, ODEQ's Workplan efforts include permitting nutrient sources and conducting groundwater monitoring from a representative well network. Additionally, ODEQ is authorized to implement the Clean Water Act National Pollutant Discharge Elimination System (NPDES) general permit for concentrated animal feeding operation (CAFOs) in Oregon. ODEQ has had a longstanding arrangement with ODA whereby ODA implements various aspects of the NPDES CAFO program. Through this arrangement with ODEQ, ODA operates the CAFO NPDES and Water Pollution Control Facility (WPCF) permit programs. EPA requests additional information from ODEQ and ODA to better understand the nature and extent of nitrate contamination in the LUB and Oregon's efforts to address it, as detailed below. Given the urgency inherent in any situation involving drinking water contamination, EPA asks that ODEQ and ODA provide the requested information within 30 days of your receipt of this letter.

- 1. The Workplan states that ODEQ provides on-going groundwater monitoring activities, which include sampling, analysis and reporting from a representative well network. EPA requests the results of any groundwater monitoring activities that are not already summarized in the Second Action Plan reports or otherwise provided to EPA in previous communications.
- 2. The Workplan states that ODEQ is reviewing regulatory waste discharge permits to ensure requirements reflect land application at agronomic rates with focus on areas where ODEQ believes nitrate contamination exists in groundwater and domestic wells are present. EPA requests that ODEQ provide a map or other means to identify those geographic focus areas and the nearby sources of nitrate, as well as copies of the applicable waste discharge permits and any required reports submitted by the permittees within the last year.
- 3. The Workplan states that ODEQ works with regional stakeholders on water supply infrastructure projects, including the utilization of water from the Columbia River during winter in an effort to dilute nitrate concentrations in groundwater. EPA requests additional information regarding this program, its funding, the most recent groundwater quality results and any trend information.
- 4. Oregon's Second LUB Groundwater Management Area Local Action Plan, dated October 28, 2020, identified and encouraged numerous voluntary actions to reduce groundwater nitrate concentrations in the LUB. The Second Action Plan stated that many actions were scheduled for completion in 2020 or within one year of Action Plan adoption. EPA requests a general summary of the status of the voluntary actions identified in the Second Action Plan, including the degree to which each action has been implemented and any measure of its effectiveness in reducing nitrate concentrations in groundwater.

5. The Workplan explains that 13 registered CAFOs operate in the LUB, all of which obtained coverage under an NPDES individual permit or the NPDES CAFO General Permit. These permits prohibit any nutrient discharge to surface or groundwaters of the state and contain a numeric effluent limit of zero mg/L of nitrate. The permits also require an ODA-approved Nutrient Management Plan, which details how nutrient applications will conform with applicable agronomic rates. In addition, individual NPDES permits require groundwater monitoring. The CAFO General NPDES Permit authorizes ODA to require that a CAFO conduct additional surface or groundwater quality monitoring if the permittee experiences two or more discharges within a 24-month period that are not associated with a 25-year, 24-hour or greater rainfall event. EPA requests that ODA provide to EPA (1) the Nutrient Management Plan for each CAFO in the LUB; (2) a copy of any base hydrogeological report for each CAFO in the LUB; (3) a copy of each CAFO's most recent annual report; and (4) any correspondence between a state agency and a CAFO regarding potential noncompliance with an NPDES permit. With respect to this final request only, my staff will contact their counterparts in ODA and ODEQ to specify the information that is available and requested.

EPA appreciates your continued engagement and your efforts to address the complex groundwater contamination problems in the LUB. If you wish to discuss any portion of this letter, including the requests herein, please do not hesitate to contact me at kowalski.edward@epa.gov or (206) 553-6695 or your staff may contact Jeff KenKnight, at kenknight.jeff@epa.gov or (206) 553-6641. I look forward to additional coordination with you as we continue to explore resolutions to this important issue.

Sincerely,

Edward J. Kowalski Director