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

Mr. 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 the Lower Umatilla Basin in North Central Oregon

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

This letter continues communications between the U.S. Environmental Protection Agency (EPA or "Agency") and Oregon Health Authority (OHA), Department of Environmental Quality, and the Oregon Department of Agriculture regarding nitrate contamination in drinking water in the Lower Umatilla Basin (LUB), Oregon and specifically Oregon's strategy to protect residents from associated health impacts. We appreciate your continued willingness to coordinate with EPA, including your July 7, 2022 letter, which provided additional information about nitrate sources and, most pertinent to this letter, outlined your plan to ensure safe drinking water for LUB residents as soon as possible.

As EPA previously conveyed, the Agency supports the general framework of Oregon's plan to mitigate health risks from nitrate-contaminated drinking water, as set forth in the *State of Oregon Workplan: Protecting Public Health from Nitrate Exposure in the Lower Umatilla Basin Ground Water Management Area* ("Workplan"), dated December 22, 2021 and in your July 7th letter. The Workplan states that Oregon will conduct outreach and education regarding nitrate contamination in the LUB Groundwater Management Area (GWMA); perform a detailed hazard

assessment; offer free drinking water testing; and provide alternative water, where necessary. EPA is encouraged that Oregon has expedited its implementation of the Workplan. Specifically, OHA secured interim funding so that implementation will begin this summer; obtained authorization to request funding from the Oregon Legislative Emergency Board in September 2022; and is developing a comprehensive funding request for the 2023 Oregon Legislative Assembly. However, the Workplan and subsequent correspondence lack sufficient detail for EPA to evaluate whether your proposed actions will timely and adequately ensure safe drinking water for all LUB residents. To help confirm that Oregon's response action will address the immediate public health risks and to ensure it is adequately funded, below EPA has identified criteria we believe critical for an effective drinking water response action in the LUB. Hopefully this information will be helpful as you prepare for your upcoming presentations to the state Legislature.

EPA considers that an adequate response plan to address the immediate health risks in the LUB must include the following minimum components:

1. **Coordination** – An effective response plan includes a communication plan that identifies how information and responsibilities will be shared among the Oregon Governor's Office, state agencies, Umatilla and Morrow Counties and any private businesses or local utilities that have volunteered or been required to act, so that each entity's efforts serve a singular and coordinated response.

2. **Identification of Impacted Residences** – The hazard assessment, in part, should identify each residence that obtains drinking water from a private well in the LUB GWMA.

3. **Education and Outreach** – Public education and outreach should be conducted in a form and manner reasonably calculated to reach all impacted LUB residents and consistent with analogous requirements and suggestions for Tier 1 public notice set forth in *EPA's Revised Public Notification Handbook*, EPA 816-09-013, March 2010 ("Handbook"). For example, EPA recommends that the state's efforts include, as components of a comprehensive public outreach plan, (a) increased visibility and accessibility of information (*e.g.*, in all appropriate languages) regarding nitrate contamination on state and local government websites and (b) a program by which the state coordinates with local health care providers to distribute information regarding nitrate contamination to LUB residents that are particularly vulnerable to the associated health risks (*e.g.*, homes with formula fed infants). Additional public outreach methods set forth in the Handbook, such as broadcast media, should also be utilized as appropriate. Each component of the broad public outreach plan should include, among other analogous public notice elements listed in the Handbook, clear instruction for private drinking water well users to request free drinking water testing. By documenting responses to the public notices and requests for drinking water testing, Oregon should measure its progress in contacting all private well users that were identified in the hazard assessment. For those private well users identified in the hazard assessment that do not respond to public notices, Oregon should attempt personal communications, such as visits to individual residences.

4. **Drinking Water Testing** – An effective response plan provides laboratory analysis of a drinking water sample from the residence of any private well user in the LUB that requests testing, unless a nitrate test strip demonstrates that the nitrate concentration of the well is below 5 mg/L. Testing should be provided at no cost to LUB residents.

5. **Provision of Alternate Water** – Alternate drinking water should be offered to each residence where the drinking water sample exceeds the federal maximum contaminant level (MCL) of 10 mg/L nitrate based on laboratory analysis. Alternative water should be provided as needed for drinking, cooking, maintaining oral hygiene and dish washing at no cost to the resident and in a manner that minimizes the burden on the impacted resident to obtain safe drinking water, such as reverse osmosis (RO) treatment units, water delivery services or connection to a public water system. To the extent certain LUB residences will be connected to a public water system, they should receive alternate water until construction is completed. Residences provided RO treatment units should be offered regular maintenance at no cost to the resident. The alternate water supply and any necessary maintenance shall be made available to the impacted resident until sampling shows that nitrate concentrations in their private well no longer exceed the MCL.

6. **Public Records** – An effective response plan maintains and regularly publishes records such that LUB residents and the general public can better understand the scope and severity of nitrate contamination in the LUB and measure Oregon's progress in implementing its response plan. Information important for public review includes (a) the number and general location of private drinking water wells in the LUB GWMA; (b) quantitative data regarding Oregon's public outreach efforts and the responses received, including the number of residences that responded to public notices and the number of residences that received and responded to personal communications; (c) the number of residences that requested and were provided drinking water testing and the results; (d) the number of residences that were offered and accepted alternate drinking water, specifying the method of water delivery; (e) quantitative data regarding efforts to regularly maintain RO treatment units; and (f) groundwater monitoring results from the LUB GWMA Well Network and synoptic sampling events, as they occur. In making this information available, Oregon should implement precautions to ensure that LUB residents' personally identifiable information is kept confidential.

7. **Communication with EPA** – EPA requests that Oregon provide progress reports to EPA that (a) describe actions taken during the previous quarter to address the immediate health impacts of nitrate contamination; (b) identify major accomplishments and issues that arose; (c) describe actions planned for the next quarter; and (d) describe any problems or delays encountered and the solutions implemented to address them. As Oregon requests funding and initiates implementation of the Workplan in 2022 and 2023, EPA will benefit from quarterly progress reports. Less frequent progress reports may be appropriate as implementation continues. Additionally, EPA requests that Oregon designate a point of contact for ongoing coordination between EPA and the state regarding Workplan implementation and that the point of contact schedule recurring meetings coinciding with the progress reports.

Certain LUB residents may continue to consume water that exceeds the MCL for nitrate if, for example, the resident does not respond to outreach attempts; nitrate concentrations fluctuate and an individual well does not demonstrate an exceedance when testing is performed; or a resident moves to the LUB after initial public outreach efforts but before nitrate concentrations in groundwater fall below the MCL. Accordingly, the success of Oregon's response plan depends on the state's willingness and ability to sustain public outreach, testing, and alternative water supply for so long as nitrate concentrations in LUB groundwater remain elevated. The need to inform and protect LUB residents from nitrate contamination and its potential health risks will remain even after completion of initial outreach efforts in 2022 and 2023.

EPA recognizes that the burden to ensure safe water for LUB residents is placed more appropriately on the sources in the LUB that contribute excess nitrate to groundwater. EPA expects the state to hold nitrate sources accountable by requiring them to assume some of the responsibilities set forth above and, more importantly, to change their practices to reduce the amount of nitrate they discharge to groundwater in order to protect the health of their employees and neighbors. The state possesses various tools to effect reductions in nitrate concentrations, such as the authority to implement the Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program, including the development and enforcement of individual NPDES permits for industrial discharges and the Oregon Concentrated Animal Feeding Operation NPDES General Permit. Use of such tools will be required, since reliance on voluntary best management practices has resulted in increasing nitrate trends since the Groundwater Management Area's first Action Plan in 1997. Recurring meetings between EPA and the state, as requested above, will include discussion of the state's efforts and progress in implementing the changes necessary to mitigate nitrate sources. If EPA observes a reluctance to require that sources implement necessary changes, EPA will consider increased federal intervention, including use of its emergency authorities in Section 1431 of the Safe Drinking Water Act, to lessen sources' contributions of nitrate to groundwater.

As we have previously expressed, EPA appreciates your continued engagement and your efforts to address the complex groundwater contamination problems in the LUB. The Agency will continue to closely monitor the situation and continues to assess options for additional Agency intervention if necessary. Please inform us of the results of your upcoming funding requests. In the interim, if you wish to discuss any portion of this letter, including the minimum components of an adequate response plan set forth above, 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 you begin to implement your plans to protect LUB residents.

Sincerely,

EDWARD KOWALSKI

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Edward J. Kowalski
Director