



May 30, 2024  
Project No. M8128.02.031

Wesley Thomas  
Oregon Department of Environmental Quality  
700 NE Multnomah Street, Suite 600  
Portland, OR, 97232

Re: Siltronic Corporation Comments in Response to NWN Source Control Interim Remedial Action Measure Concept and Agreement to Move into Design

Dear Wes:

On behalf of Siltronic Corporation (Siltronic), Maul Foster & Alongi, Inc. (MFA) has prepared this letter providing comments on the letter regarding Source Control Interim Remedial Action Measure (IRAM) Concept and Agreement to Move into Design (IRAM letter), dated May 9, 2024, and prepared by Ede Environmental on behalf of NW Natural (NWN). Siltronic appreciates the opportunity to review this document and is providing comments focused on two major areas.

## Implementation Concerns

Siltronic recognizes that the purpose of the IRAM letter is to provide a conceptual understanding of the proposed IRAM and that further details regarding project design and implementation will be provided in the forthcoming Basis of Design Report and further design documents. However, Siltronic continues to have specific concerns regarding the construction of the proposed ISS barrier wall and deep ISS prisms proposed on the Siltronic property. These concerns have been articulated by Siltronic in previous comment letters, and will not be repeated in detail here, but are generally focused on the following:

- **Riverbank stability.** Siltronic continues to have concerns regarding the geotechnical stability of the Siltronic riverbank during construction of the proposed IRAM. This issue was highlighted during the in-river ISS Field Pilot Study which was challenged by sloughing of steep sediments. The riverbank is a critical area connecting the proposed IRAM to the proposed Gasco Sediments Site remedy, and to date, Siltronic is not aware of any specific proposal for riverbank remedy (conceptual or otherwise) that NWN has provided to EPA or DEQ. This lack of information makes it difficult to evaluate potential adverse impacts of upland ISS implementation on riverbank stability.
- **Control of mounding groundwater.** Groundwater mounding has the potential to adversely impact Siltronic's infrastructure, including the potential for damage to building foundations and underground utilities. Siltronic understands that NWN proposes to control groundwater mounding with its expanded HCC extraction well system. What measures are proposed to prevent mounding groundwater if there is a failure of the HCC system? In a footnote, NWN mentions an option for a "breaching" design element. Siltronic would like to better understand this design element. Is it possible that this option could be used in the event of HCC failure?

- Vibrations. Siltronic's upland operations are highly sensitive to vibrations, and large-scale construction on the Siltronic property will require vibration monitoring acceptable to Siltronic and its technical consultants to confirm that construction activities do not have the potential to adversely impact Siltronic's manufacturing process.

Siltronic believes that these concerns should be addressed proactively during NWN's design process to avoid delays later in the process, or potential disruptions during remedy implementations. Consideration of these topics should be included in early design documents, including the initial Basis of Design report. Siltronic proposes to coordinate with NWN as needed to address these concerns as early in the design process as possible. Design documents should also include discussion of contingency measures addressing upland implications of potential remedy failure, including the potential groundwater mounding in the event of HC&C system failures.

## Questions Regarding Scope of Upland ISS

Siltronic has previously commented with concerns regarding the potential for continued downward migration of DNAPL into the Deep Lower Alluvium water bearing zone, which is uncontrolled by the proposed IRAM. The inclusion of the proposed upland ISS treatment to immobilize DNAPL has the potential to address these concerns. The IRAM letter identifies targeted areas of ISS treatment, described as ISS prisms, but provides little information about how these areas were identified or defined. In particular, it is unclear why ISS is only proposed to address DNAPL hot spots below 105 feet bgs on the Siltronic property. cursory review of boring logs within the area of interest for nearshore upland ISS indicates that DNAPL is present at depths shallower than 105 feet bgs in multiple locations, and NWN has identified potential hot spots containing tar and DNAPL in this area as well.<sup>1</sup> It is unclear if the depths of the proposed ISS prisms represent a determination that DNAPL hot spots are not present at shallower depths, or if additional remedial measures will be proposed in this same area in the forthcoming feasibility study report.

NWN also proposed a process for further refinement of the proposed ISS treatment prisms utilizing TarGOST borings. Siltronic notes that this proposed process only allows for reduction in the size of the existing prisms, and does not account for any potential expansion of the ISS treatment areas. Given this refinement process, coupled with the lack of explanation for how the treatment prisms were identified, Siltronic is unable to assess if the proposed upland ISS treatment will sufficiently address the DNAPL present at depth, or the potential for continued downward migration of DNAPL.

Finally, Siltronic notes that the final extent of the ISS barrier wall on the Siltronic property is the subject of further evaluation by NWN. Figures 1 and 2 of the IRAM letter do not indicate that the Area of Interest extends the full 350 feet minimum that is presently proposed for the deep ISS barrier wall on the Siltronic property. Therefore, Siltronic would like to understand the rationale for this proposed minimum length. A related question is whether a shorter wall length, which would be less disruptive, would provide the necessary protection. Siltronic looks forward to the forthcoming source control addendum addressing these questions.

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<sup>1</sup> Anchor. 2018. Interim Feasibility Study. Anchor QEA, Portland, Oregon. November 21.

Sincerely,

Maul Foster & Alongi, Inc.



Courtney Savoie, RG  
Senior Hydrogeologist



Michael R. Murray, RG, PE  
Principal Hydrogeologist

## Attachment

Limitations

cc: Elizabeth Bingold, Siltronic Corporation

Traci Parker, Siltronic Corporation

Myron Burr, Restoration Strategies

David Rabbino, Jordan Ramis

Bob Wyatt, NW Natural

Patty Dost, Pearl Legal Group PC

Halah Voges, Anchor QEA

Matt Davis, Anchor QEA,

Ryan Barth, Anchor QEA

Jen Mott, Anchor QEA

Mike Crystal Severson Environmental Services, Inc.

Dan Hafley, Oregon Department of Environmental Quality

Amber Lutey, Oregon Department of Environmental Quality

Hunter Young, U.S. Environmental Protection Agency

## Limitations

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