

From: THOMAS Wesley * DEQ
To: Parker, Traci; elizabeth.bingold@siltronic.com; Burr, Myron (RESTORATION STRATEGIES LLC); "Courtney Savoie"
Cc: LUTEY Amber * DEQ
Subject: FW: Gasco OU Revised Source Control Addendum
Date: Thursday, November 2, 2023 1:30:00 PM

Siltronic team,

I recognize that some of you were copied on the email below, but wanted to provide access to the Revised Source Control Addendum via our Content Manager website here:

<https://ormswd2.synergycds.com/HPRMWebDrawer/Record/6458209>

Based on our previous conversations, we anticipate that Siltronic has an interest in reviewing this document, and that Siltronic may want to provide comments on the report for DEQ to consider. We are requesting that Siltronic provide comments, if any, to us by December 15th (approximately 6 weeks).

Thanks,

Wes

Wesley Thomas, P.E.

Project Manager/Environmental Engineer

O: 503-229-6932

M: 971-263-8822

Wesley.Thomas@deq.oregon.gov

From: Halah Voges <hvoges@anchorqea.com>
Sent: Thursday, November 2, 2023 1:08 PM
To: THOMAS Wesley * DEQ <wesley.thomas@deq.oregon.gov>
Cc: SEIDEL Paul * DEQ <paul.seidel@deq.oregon.gov>; Myron Burr <myron.burr.restoration-strategies@siltronic.com>; elizabeth.bingold <elizabeth.bingold@siltronic.com>; Wyatt, Robert <robert.wyatt@nwnatural.com>; Patricia Dost <pdost@pearllegalgroup.com>; Jen Mott <jmott@anchorqea.com>; Matthew Davis <mdavis@anchorqea.com>; Rob Ede <robe@hahnav.com>; Ryan Barth <rbarth@anchorqea.com>; Crystal, Mike <mcrystal@sevenson.com>
Subject: Gasco OU Revised Source Control Addendum

Wes,

On behalf of NW Natural, we are pleased to submit a revised Source Control Addendum for DEQ review and approval. The attached revision significantly updates the draft document that was submitted to DEQ in November 2022.

The revised addendum incorporates significant updates to the source control approach as provided in the 2022 draft document. These updates are based on DEQ comments, discussions and agreement on path forward, as well as extensive technical design team evaluations. As previously discussed with DEQ, a few of the more notable revisions to this document, all of which have been thoroughly vetted by the design team, include:

- The document makes it clear that evaluation and design of the recommended source control measure (SCM) enhancements will be performed under DEQ oversight and approval (as an interim remedial action measure), with the intention that the recommended additions be constructed concurrently with, and physically integrated into, the in-water remedy being designed with the EPA. The approved SCM enhancements would then be incorporated into the upland remedy through the ongoing upland FS process.
- Based on feedback from DEQ and additional evaluations, NW Natural has modified the recommended source control approach to fully retain the existing HC&C system, which is already achieving source control objectives for the Alluvium Water Bearing Zones (WBZs). The recommended approach expands the existing HC&C system to include Fill and additional Alluvium WBZ controls and adds a shoreline deep in-situ stabilization and solidification (ISS) barrier wall to prevent potential future dense non-aqueous phase liquid (DNAPL) migration past the shoreline.
- The construction method for the ISS barrier wall has been updated based on further design evaluations and detailed discussions with equipment vendors. The barrier wall installation will be performed with the Bauer Cutter Soil Mixing (CSM) approach to deep soil mixing. This approach uses low impact, proven and available technology that will meet project design objectives. Detailed means and methods for construction of the barrier wall and other IRAM components will be developed by NWN and DEQ in future IRAM design deliverables.

Significant time and effort have gone into evaluating and developing the recommended SCM path forward and as we have discussed, many of the comments provided from DEQ's review of the 2022 draft document are no longer material. However, responses to these comments are included as an appendix to the revised addendum. We also feel that NW Natural and DEQ have made significant progress on an agreed upon approach for moving this critical work forward in a manner that facilitates necessary integration with the in-water project as well as the upland FS and remedy selection process.

Thank you,

Instructions to access the FTP site:

To access the FTP site automatically using Windows Explorer please follow the steps below.

- From Windows XP desktop select Start -> Run or for Windows 7 select Start -> and click in the search box
- Copy/Paste the following line into the "Open" box for XP or the "Search" box for Windows 7 and hit "enter"
[%systemroot%/explorer ftp://000029-02.40%40000029-02.40:natura1-11@ftp.anchorqea.com/](ftp://000029-02.40%40000029-02.40:natura1-11@ftp.anchorqea.com/)
- You should now be logged into the site using Windows Explorer. You can use copy/paste to move files to or from the site

To access the FTP site manually using a FTP browser like [CoreFTP](#) or Windows Explorer please use the info below.

- Site URL: <ftp://ftp.anchorqea.com>
- Username: 000029-02.40@000029-02.40
- Password: natura1-11 (the 1's are ones)

To access the FTP site via web browser please follow the steps below.

- Click on the following link: <https://ftp.anchorqea.com/aq>
- Input the username and password that are listed in the above section
- Use the tools available directly to the site to download or upload

Halah M. Voges, P.E.
Principal Engineer

ANCHOR QEA, LLC

1201 3rd Avenue, Suite 2600
Seattle, WA 98101
T 206.287.9130
D 206.903.3303
C 206.462.9572

ANCHOR QEA, LLC

Please consider the environment before printing this email.

This electronic message transmission contains information that may be confidential and/or privileged work product prepared in anticipation of litigation. The information is intended for the use of the individual or entity named above. If you are not the intended recipient, please be aware that any disclosure, copying, distribution, or use of the contents of this information is prohibited. If you have received this electronic transmission in error, please notify us by telephone at 206.287.9130.