

**NW Natural ISS Field Pilot Study Implementation
Gasco Sediments Site – September/October 2023
Field Change Request Form**

Project Name: Gasco Sediments Project Area **Contractor:** Colin Gordon Associates

Field Activity: ISS Field Pilot Implementation **Request Number:** 2

To: Hunter Young, U.S. Environmental Protection Agency **Date:** September 29, 2023

Field Change Request Title: Clarification on Vibration Monitoring Field Pilot Study Scope of Work

Description

This Field Change Request Form #2 provides clarification of and additional details on the “preliminary vibration monitoring program” presented in Section 3.9 of the EPA-approved *Final Revised In Situ Stabilization and Solidification Field Pilot Study Work Plan* (Work Plan).

Recommended Change

The preliminary vibration monitoring program in Section 3.9 of the Work Plan proposed “monitoring both ambient [vibration] conditions and construction-induced vibrations associated with the FPS” to inform a full-scale remedy design that avoids vibration-related impacts to the Siltronic Corporation’s (Siltronic’s) operations. Consistent with the approved program, vibration monitoring data during the field pilot study (FPS) will be obtained with two arrays of accelerometers. One array is for monitoring ground surface vibrations with distance from the ISS activities. The other is a structural array for monitoring specific locations within Siltronic’s facilities. Subsequent to discussions with representatives of Siltronic, the NW Natural Design Team recommends the following specific array details to finalize the vibration monitoring scope of work:

- **Ground surface array:** Six accelerometers will be placed at three exterior locations to measure vertical and horizontal vibrations at each location. These sensors will be deployed and collected at the beginning and end of each day.
 - Data from the ground surface array (all exterior sensors) will be collected for at least 3 consecutive days during the FPS, including collection of ambient vibration conditions during periods in which no construction activities are occurring.
- **Structural array:** Accelerometers will be placed in three interior locations, one location within the Fab 1 building and two locations within the Fab 2 building. The Fab 1 indoor sensor and one of the Fab 2 indoor sensors will measure vertical and horizontal vibrations. The second Fab 2 indoor sensor will measure vertical vibrations.
 - Data from the structural array (all interior sensors) will be collected for at least 10 consecutive days during the FPS, including collection of ambient vibration conditions during periods in which no construction activities are occurring. This sensor array will continue collecting data for approximately 5 days following completion of in-water construction activities to further expand the ambient conditions dataset.

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Respondent Lead:

Ryan Barth

Respondent Project Lead



Signature

September 29, 2023

Date

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