

January 3, 2023

Wesley Thomas  
Oregon DEQ – Northwest Region  
700 NE Multnomah Street, Suite 600  
Portland, Oregon 97232

Re: Request for No Longer Contained-In Determination  
Upland Feasibility Study DNAPL Data Gaps Investigation-Derived Waste  
Former Gasco Manufactured Gas Plant Operable Unit, ECSI No. 84  
Portland, Oregon

Dear Mr. Thomas,

During the first and second quarters of 2022, soil borings were installed within the Gasco Operable Unit (OU) to obtain supplemental data needed to support the upland Feasibility Study (FS). All work was performed in accordance with the approved *Revised Upland Feasibility Study DNAPL Data Gaps Investigation Work Plan*.<sup>1</sup> Excess soil sampling investigative-derived wastes (IDW) were generated as part of this work.

The purpose of this letter is to receive Oregon Department of Environmental Quality (DEQ) concurrence and approval of a “no longer contained-in” determination for eight drums of soil IDW. Trace concentrations of trichloroethene (TCE) and cis-1,2-dichloroethene (DCE) were detected in the composite IDW characterization sample collected from these drums, which would otherwise bear an F002-listed hazardous waste code (spent TCE halogenated solvent) due to origination from within the Siltronic TCE Contaminated Media Management Area (CMMA) as defined in the November 2021 draft *Contaminated Material Management Plan* (CMMP).<sup>2</sup>

Anchor QEA, LLC, and Hahn and Associates, Inc., have prepared the draft CMMP for the Former Gasco Manufactured Gas Plant Gasco OU dated, November 19, 2021, on behalf of NW Natural. This request is consistent with our understanding of the DEQ comments on the draft CMMP provided to NW Natural in a letter dated May 4, 2022.<sup>3</sup>

## No Longer Contained-In Determination

Per the draft CMMP, environmental media generated from within the TCE CMMA must be laboratory-tested, and contaminant concentration data must be evaluated to determine whether the

---

<sup>1</sup> Anchor QEA, LLC, 2021. *Revised Upland Feasibility Study DNAPL Data Gaps Investigation Work Plan*. Prepared for NW Natural. December 8, 2021.

<sup>2</sup> Anchor QEA and HAI (Anchor QEA, LLC and Hahn and Associates, Inc.), 2021. *Contaminated Material Management Plan*. Prepared for NW Natural. November 19, 2021.

<sup>3</sup> DEQ, 2022. Letter to: Bob Wyatt, NW Natural. Regarding: Contaminated Materials Management Plan. Former Gasco Manufactured Gas Plant Operable Unit Portland, Oregon, ECSI# 84. May 4, 2022.

waste would require disposal as a Resource Conservation and Recovery Act (RCRA) spent halogenated solvent F002-listed hazardous waste (spent TCE halogenated solvent). For these wastes, a no longer contained-in determination is made based on a comparison to the DEQ risk-based concentrations (RBCs) for the Occupational Receptor Scenario of the Soil Ingestion, Dermal Contact, and Inhalation exposure pathway for the five TCE-related compounds.<sup>4</sup> If soil wastes are impacted by Siltronic spent TCE or TCE-related compounds at concentrations greater than the threshold values provided in the following table, then the waste soil or sediment would require management as F002-listed hazardous waste. If these soil or sediment wastes have concentrations of TCE-related compounds equal to or less than the threshold values provided in the following table, then a no longer contained-in determination would be appropriate, such that the waste would not require management as an F002-listed hazardous waste.

Analyte	May 2018 DEQ RBCs (µg/kg)
1,1-DCE	29,000,000
cis-1,2-DCE	2,300,000
trans-1,2-DCE	23,000,000
TCE	51,000
Vinyl chloride	4,400

Note:  
µg/kg: micrograms per kilogram

## 2022 Data Gaps IDW Sample Results

On July 21 and July 22, 2022, Anchor QEA collected three composite soil samples from 24 drums of soil IDW generated during the upland FS dense nonaqueous phase liquid (DNAPL) data gaps investigation activities. Each composite sample was composed of a subsample collected from eight drums. A five-point composite soil sample was also collected from a 5-cubic-yard drop box. The drums and drop box contain soils that were generated within the designated TCE CMMA. Wastes are currently being stored on the NW Natural Gasco site.

The composite samples were submitted to Apex Laboratories, LLC, for analysis of the following:

- Total cyanide (U.S. Environmental Protection Agency [EPA] 9013M/9012)
- Free liquids (EPA 9095B)
- Total solids (SM 2540G)
- Corrosivity (EPA 9045D)
- Ignitability (EPA 1010M)
- Total petroleum hydrocarbons: diesel- and oil-range (NWTPH-Dx) and gasoline-range (NWTPH-Gx)

---

<sup>4</sup> Anchor QEA and HAI 2021

- Total metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver (EPA 6020B)
- Volatile organic compounds (EPA 5035A/8260D)
- Semivolatile organic compounds (EPA 8270E)

As summarized in the following table, TCE was detected in one of the four IDW characterization soil samples (DG-IDW-072222-03) at an estimated concentration of 30.5 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ). Additionally, cis-1,2-DCE was detected at an estimated concentration of 17.3  $\mu\text{g}/\text{kg}$  in the same sample. The detected estimated concentration of cis-1,2-DCE is the same as the method detection limit (MDL) for this sample.

Analyte	20x TCLP Limit ( $\mu\text{g}/\text{kg}$ )	F002 Contained-In Threshold Screening Values ( $\mu\text{g}/\text{kg}$ )	Results ( $\mu\text{g}/\text{kg}$ )	Qualifier
TCE	10,000	51,000	<b>30.5</b>	<b>J</b>
cis-1,2-DCE	--	2,300,000	<b>17.3</b>	<b>J</b>
Trans-1,2-DCE	--	23,000,000	17.3	U
1,1-DCE	14,000	29,000,000	17.3	U
Vinyl chloride	4,000	4,400	17.3	U

Notes:

**Bold:** detected analyte

J: estimated concentration

U: Analyte is not detected above the MDL

--: no 20x TCLP limit established

These detected concentrations are well below DEQ May 2018 RBCs for Occupational Exposure by Ingestion, Dermal Contact, and Inhalation used for evaluating the applicability of an F002 waste code for soil IDW. Results of analytical data are provided in Table 1. Laboratory analytical results and chain-of-custody documentation are provided in Attachment 1.

Though not material to this "no longer contained in" request, for DEQ's information we are also providing laboratory data establishing that IDW from the DNAPL data gaps event does not exhibit the toxicity characteristic. Neither the reported concentrations nor the MDLs for these constituents exceed RCRA toxicity characteristic regulatory levels. These regulatory levels are based on leachate concentrations tested by toxicity characteristic leaching procedure (TCLP) methodology. Total concentration analytical results were screened against EPA's TCLP regulatory levels multiplied by 20 (Table 1) to account for attenuation that occurs during the leaching process.

## Conclusions

TCE and cis-1,2-DCE were detected at low levels, well below the F002 hazardous waste screening levels. The remaining breakdown products of TCE (trans-1,2-DCE, 1,1-DCE, and vinyl chloride) were not detected above the laboratory MDLs. All MDLs reported by the laboratory were below the DEQ

May 2018 RBCs for Occupational Exposure by Ingestion, Dermal Contact, and Inhalation. Based on review of analytical data and generator knowledge, the following characterizations were made to the waste:

- The waste is not ignitable, corrosive, or reactive.
- Concentrations of detected constituents are below toxicity characteristic levels.
- The F002-listed constituents detected in the IDW do not pose an unacceptable risk under an occupational scenario, and other F002-listed constituents were not detected.

Based on the preceding, the IDW does not exhibit the characteristics of hazardous waste. Detected TCE and TCE breakdown products are well below DEQ's occupational RBCs. The IDW meets the criteria for no longer containing listed waste, and NW Natural requests a no longer contained-in determination from DEQ to confirm the classification of this IDW as nonhazardous waste.

Please contact me if you have any questions.

Thank you,



Benjamin A Uhl  
Anchor QEA, LLC

cc: Robert Wyatt (NW Natural); Patty Dost (Pearl Legal Group); Myron Burr (Siltronic Corporation); Ryan Barth, Jen Mott, and Tim Stone (Anchor QEA, LLC); and Rob Ede (Hahn and Associates, Inc.)

## Table

Table 1                  Soil Testing Analytical Results

## Attachment

Attachment 1          Apex Laboratory Report No. A2G0645