

REDACTED

From: THOMAS Wesley * DEQ <wesley.thomas@deq.oregon.gov>
Sent: Tuesday, December 5, 2023 4:38 PM
To: Wyatt, Robert <robert.wyatt@nwnatural.com>
Cc: Byrd, William <wbyrd@sevenson.com>; Patricia Dost <pdost@pearllegalgroup.com>; Rob Ede <robe@hahnenv.com>; Tim Stone <tstone@anchorqea.com>; Crystal, Mike <mdcrystal@sevenson.com>; Ryan Barth <rbarth@anchorqea.com>; Joe Burke <jburke@sevenson.com>; Jen Mott <jmott@anchorqea.com>; paul.seidel <paul.seidel@deq.oregon.gov>; OBRIEN Audrey * DEQ <Audrey.OBRIEN@deq.oregon.gov>; BATES Zebuliah * DEQ <Zebuliah.BATES@deq.oregon.gov>
Subject: RE: Gasco: Request for No Longer Contained-In Determination

Bob et al.,

Please see the attached No Longer Contained-In Determination for the stockpiled soils generated during the Siltronic Pretreatment Plant oil water separator rebuild. Let me know if you have any questions.

Wes

Wesley Thomas, P.E.
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From: Jen Mott <jmott@anchorqea.com>
Sent: Monday, November 13, 2023 2:02 PM
To: THOMAS Wesley * DEQ <wesley.thomas@deq.oregon.gov>
Cc: Byrd, William <wbyrd@sevenson.com>; Wyatt, Robert <robert.wyatt@nwnatural.com>; Patricia Dost <pdost@pearllegalgroup.com>; Rob Ede <robe@hahnenv.com>; Tim Stone <tstone@anchorqea.com>; Crystal, Mike <mdcrystal@sevenson.com>; Ryan Barth <rbarth@anchorqea.com>; Joe Burke <jburke@sevenson.com>

Subject: Gasco: Request for No Longer Contained-In Determination

Wes,

The following is provided on behalf of Chip Byrd.

Mr. Thomas,

Please find the attached letter requesting “No Longer Contained-In” Determination for non-hazardous soils generated during the rebuilding of containment area for new Siltronic Pretreatment oil water separator at NW Natural’s Gasco Facility, 7900 NW St. Helens Rd., Portland, Oregon

As described in the letter, A trace concentration of cis-1,2-dichloroethene (cis-1,2-DCE) was detected in the composite sample collected from stockpile soils, which would otherwise bear a F002-listed hazardous waste code (spent TCE halogenated solvent) due to a likely source from within the Siltronic TCE Contaminated Media Management Area

Though not material to this “no longer contained-in” request for DEQ’s information we are also providing laboratory data establishing that soil does not exhibit the toxicity characteristic regulatory levels.

Any questions, please contact me.

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Oregon DEQ No Longer Contained-In Determination Approval Signoff Sheet

Site Name: Gasco Operable Unit (ECSI #0084 and #0183)
Location: 7900 NW St. Helens Road, Portland, Oregon 97210
Media: Upland Soil Generated During Rebuilding of Containment Area for Siltronic Pretreatment Plant Oil Water Separator
Approved Disposal: Soil: Permitted Subtitle C or Subtitle D Landfill

DEQ Project Manager: Wesley A. Thomas Date: 12/1/2023
Wesley A. Thomas

DEQ HW Staff: Zeb Bates Date: 12/1/2023
Zeb Bates

DEQ HSW Program Manager: Audrey M O'Brien Date: 12/5/2023
Audrey O'Brien

DEQ Cleanup Program Manager: Paul Seidel Date: 12/5/2023
Paul Seidel

State of Oregon
Department of Environmental Quality

Memorandum

To: Gasco Former MGP Operable Unit File, ECSI #0084
Siltronic Corporation File, ECSI #0183

Date: 12/01/2023

From: Wesley Thomas, Project Manager, Northwest Region Cleanup Program

Through: Zeb Bates, HW Inspector, Northwest Region HW Program

Approved: Audrey O'Brien, Manager, Northwest Region HW Program
Paul Seidel, Manager, Northwest Region Cleanup Program

Subject: No Longer Contained-In Determination
Soil Generated During the Rebuilding of Containment Area
for Siltronic Pretreatment Plant Oil Water Separator
Gasco Operable Unit
Portland, Oregon

The DEQ's Northwest Region Environmental Cleanup, Hazardous Waste and Solid Waste Programs have prepared this No Longer Contained-In (NLCI) Determination for approximately 100 cubic yards of soil generated during the replacement of the Siltronic pretreatment plant oil water separator. The Siltronic pretreatment plant treats groundwater pumped from the Alluvium water-bearing zones (WBZs) via the Gasco Operable Unit (OU) hydraulic control and containment system, which operates as a groundwater source control measure. Soil subject to this NLCI Determination was removed from around and under the oil water separator containment area and stockpiled within the Gasco OU for testing and disposal.

Background Information

The Portland Gas & Coke Company (PG&C) constructed an oil-manufactured gas plant (MGP), known as the Gasco facility, on the current NW Natural property in 1912 and 1913. The Gasco facility was operated as an MGP by from 1913 to 1956. The northern portion of the current Siltronic property (within the Gasco OU) was used for MGP residuals management during a portion of this time frame. PG&C sold the property now occupied by Siltronic in 1960. Siltronic constructed a silicon wafer manufacturing plant on the property in 1978 with plant operations commencing in March 1980 and formerly used trichloroethene (TCE) in its production of silicon wafers.

NW Natural prepared a draft *Contaminated Media Management Plan*¹ (CMMP) for the Gasco OU describing waste characterization and disposal practices for various media. The CMMP discusses the following typical suite of contaminants within the Gasco OU based on its operational history:

- **MGP/Hydrocarbon Wastes:** Cyanide; total petroleum hydrocarbons; polycyclic aromatic hydrocarbons (PAHs); volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX); and metals.
- **Siltronic Spent Trichloroethene Wastes:** TCE and TCE breakdown products: cis-1,2-dichloroethene (cis 1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1-dichloroethene (1,1-DCE), and vinyl chloride (VC).

¹ Anchor QEA, LLC and Hahn and Associates, Inc. 2021. Contaminated Materials Management Plan. Prepared for NW Natural. November 19.

Contamination classified as “MGP/Hydrocarbon Wastes” generally resulted from former MGP operations or hydrocarbon-related sources. Toxicity characteristic (TC) regulatory levels have been determined by the U.S. Environmental Protection Agency (EPA) and DEQ as not applicable to MGP wastes. As such, TC waste codes (D004 through D043) are not applied to environmental media assumed to be impacted solely by MGP-related contaminants. Although the toxicity characteristic leaching procedure (TCLP) analytical method does not apply to the regulatory classification of MGP waste materials, NW Natural may still elect to use TCLP testing for characterization purposes. Alternatively, total concentrations reported by the laboratory may be screened against the TC concentrations multiplied by 20 to account for attenuation by leaching. Consistent with the Gasco OU CMMP, if environmental media removed from the Gasco OU exceeds the TC criteria by TCLP methodology or the 20x TC criteria using total concentrations, NW Natural will dispose of the media at a Subtitle C facility as non-hazardous industrial waste. Non-hazardous wastes disposed at a Resource Conservation and Recovery Act (RCRA) Subtitle C facility will receive an Oregon “State-Only” waste code of X004 (non-hazardous industrial waste).

Per the draft CMMP, environmental media contaminated with “Siltronic Spent TCE Wastes” are laboratory-tested, and contaminant concentration data are screened to determine whether the material would require disposal as a RCRA spent halogenated solvent waste code F002 (F002)-listed hazardous waste (spent TCE halogenated solvent). For these materials, a NLCI Determination must be 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 (DEQ 2018a [or current version]). If soil impacted with Siltronic spent TCE wastes has concentrations of the TCE-related compounds greater than the threshold values provided in the table below, the soil requires management as F002-listed hazardous waste. If the soil has concentrations of TCE-related compounds equal to or less than the threshold values provided in the table below, DEQ can make a NLCI Determination, such that the waste will not require management as an F002-listed hazardous waste.

F002 Constituent	Contained-In Threshold Value (µg/kg)
TCE	51,000
Cis-1,2-DCE	2,300,000
Trans-1,2-DCE	23,000,000
1,1-DCE	29,000,000
VC	4,400

Gasco OU Excavated and Stockpiled Soil Characteristics

Approximately 100 cubic yards of soil removed from around and under the Siltronic pretreatment plant oil water separator containment was stockpiled for testing and disposal. On October 2, 2023, Severson Environmental Services (SES), on behalf of NW Natural, collected two 5-point composite samples from within the stockpiled soil. Upon receipt of the samples, APEX laboratory homogenized the two samples into a single composite sample representative of the stockpiled soils. This sampling frequency meets the minimum requirements listed in the draft CMMP.

The laboratory composite soil sample was analyzed for the following:

- Total cyanide (EPA D7511)
- Total solids (SM 8000D)
- Total petroleum hydrocarbons: diesel range- and oil-range (NWTPH-Dx) and gasoline range (NWTPH-Gx)

- RCRA eight total metals: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver (EPA 6020B)
- TCLP RCRA eight metals (EPA 1311/6020B)
- Volatile organic compounds (EPA 5035A/8260D)
- TCLP volatile organic compounds (EPA 1311/8260D)
- Semivolatile organic compounds (EPA 8270E)
- TCLP semivolatile organic compounds (EPA 1311/8270D)

Based on the sampling results, the stockpiled soil does not exhibit a TC of hazardous waste. In general, the results contain detections of the typical suite of contaminants associated with “MGP/Hydrocarbon Wastes.” Based in previous waste characterization and profiling, “MGP/Hydrocarbon Wastes” from the Gasco OU have not been found to exhibit ignitable, corrosive, or reactive hazardous characteristics.

The soil composite sample contained trace concentrations of cis-1,2-DCE. Based on these results, NW Natural requested a NLCI Determination to classify the soil containing trace concentrations of F002 constituents as non-hazardous waste.

No Longer Contained-In Determination

A NLCI Determination is needed to show that concentrations of F002-listed hazardous waste constituents detected in the soil waste characterization sample is below protective levels. The table below shows the relevant sample result compared to the applicable DEQ risk-based concentrations (RBCs).

Analyte	20-Times TCLP Limit	F002 Contained-In Threshold Screening Values	Sample Number: Soils 10-02-2023-3	
			Result	Qualifier
cis-1,2-DCE	--	2,300,000	14.9	J

Notes:

Bold: detected analyte

J: estimated concentration

--: no 20x TCLP limit established

To demonstrate that the stockpiled soil no longer “contains” hazardous waste, the following conditions must be met:

1. The soil must not exhibit a characteristic of hazardous waste. The potential for soil containing waste to exhibit a TC is evaluated through a comparison of constituent concentrations in leachate, extracted from the waste using the TCLP, with the limits specified in Title 40 Part 261.24 of the Code of Federal Regulations (40 CFR 261.24). Representative (total) chemical concentrations for the soil are compared to a value of 20 times the TCLP limit (to account for the 20 to 1 dilution inherent in the TCLP analysis method) to determine if the limits could potentially be exceeded. If the 20 times TCLP limit for any chemical is exceeded, then the waste may be a characteristic hazardous waste. As noted above, the soil composite sample result did not exhibit a TC of hazardous waste.
2. Detected concentrations of TCE and/or TCE breakdown products in environmental media from this site would be considered by DEQ to contain a listed hazardous waste (F002). Concentrations of hazardous constituents from listed waste must be below human health risk-based levels. Currently, it is DEQ policy that if no longer contained-in-approved media is to be taken to a lined permitted Subtitle C or D facility then concentrations of hazardous constituents should be below the DEQ “Occupational” Risk-Based Concentration (RBC) for direct contact. Applicable RBCs are provided in the table above. The concentration of cis-1,2-DCE is several orders of magnitude below the RBC for

direct contact with soil under an occupational exposure scenario. Based on this result, the soil would be acceptable for disposal at a permitted Subtitle C or D landfill.

3. RCRA Land Disposal Restrictions do not apply because the soil was not removed from the Area of Contamination before this NLCI Determination.

Underlying constituents of TCE and/or its breakdown products might be present in the stockpiled soil at concentrations below the minimum reporting levels (MRLs) shown in the laboratory data. Using previous site information, the MRL concentrations, and knowledge of process, DEQ can assume the following about the stockpiled soil:

- It would not be ignitable, corrosive, or reactive;
- Concentrations of underlying constituents would be below TC levels; and
- Concentrations of underlying F002-listed constituents would be below DEQ Occupational RBCs.

Based on our review of the data and the above findings, DEQ has determined that the stockpiled soil does not exhibit characteristics of hazardous waste. Detected concentrations of TCE and/or TCE breakdown products are below the DEQ's occupational RBCs. Thus, the soil meets the criteria for no longer containing listed waste. MGP waste streams are not covered in this NLCI evaluation or approval.

The stockpiled soil may be disposed of at a permitted Subtitle C or Subtitle D landfill. NW Natural should contact the applicable landfill facility(ies) to verify that they are willing to accept the soil waste. If the soil waste is not managed and disposed of following these conditions of approval, this NLCI Determination does not apply, the waste remains hazardous waste, and must be managed and disposed of in compliance with applicable hazardous waste laws.