Resource Conservation and Recovery Act Facility Investigation (RFI) Final Report FENWAL International, Inc. Maricao, Puerto Rico

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August 2020

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LIST OF ABBREVIATIONS

CERCLA	Comprehensive Environmental Response Compensation and Liability Act, as amended
DNER	Department of Natural and Environmental Resources
EQB	Puerto Rico Environmental Quality Board
EQ Lab	Environmental Quality Laboratories, Inc.
GET	GeoEnviroTech, Inc.
GPR	Ground Penetrating Radar
NHOs	Nonhalogenated Organics
PREQB	Puerto Rico Environmental Quality Board
RCRA	Resource Conservation and Recovery Act, as amended
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RFI WP	RCRA Facility Investigation Work Plan
RSLs	USEPA Regional Screening Levels
SVOC	Semi-Volatile Organic Chemical
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

EXECUTIVE SUMMARY

This report discusses the findings and conclusions from a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) conducted by Fenwal International, Inc. (Fenwal) at its manufacturing facilities located at Maricao, Puerto Rico (Facility). See Figure 1 for a Location Map of the Facility. In particular, the RFI was designed to investigate an area identified as area of concern #2 (the AOC #2) in a RCRA Facility Assessment (RFA) conducted in 1988 by the former Puerto Rico Environmental Quality Board (the 1988 RFA), in accordance with an RFI Work Plan (the RFI WP) approved by the Environmental Protection Agency (EPA) on October 10, 2019.

Six (6) 2-inch diameter soil borings were drilled. Soil borings #1, #2, #3, #4, and #6 were drilled up to a depth of 10-foot below existing grade. Soil boring #5's depth was limited to 5-foot due to the presence of shallow bedrock (serpentinite). The soil borings were located around AOC #2, with three (3) of them (Soil borings #1, 2 and 3) drilled in the location of a floor drain found in AOC #2. Refer to Figure_2. The soil borings were drilled by GeoEnviroTech (GET), after identifying the location of underground utilities using a Ground Penetrating Radar (GPR). Soil borings #1 and 5 had to be re-located several inches from their original planned location but in the same general targeted area, to avoid underground utilities.

Soil samples, one for each boring, were collected at the surface of each boring, from grade to a depth of 0.5 feet. Thereafter, samples were collected at 2-feet intervals up to the depth of each boring, that is, five (5) samples from each boring except for boring #5 in which only three (3) were collected up to its depth at 5 feet. Sample containers were provided by EQ Lab. The soil samples were collected at the field by EQ Lab. During the field sampling activities, EQ Lab scanned each sample with an Organic Vapor Analyzer (OVA) equipped with a Photoionization Detector (PID) to determine the presence of _volatile organic compounds. All field scans were negative to the presence of volatile organic compounds. Soil samples in their respective containers were placed inside coolers with ice to maintain the temperature at or below 4° Celsius without

freezing to prevent degradation and transported by EQ Lab to its analytical laboratory.

All samples were analyzed for volatile organic compounds (VOCs), Semi VOC (SVOCs) and Nonhalogenated Organics (NHOs). Refer to Appendix 7 for the tables provided by EQ Lab with all the pollutants analyzed. Of these pollutants, and according to the approved RFI WP, Cyclohexanone, Methyl Ethyl Ketone (MEK), Dichloromethane (Methylene Chloride), and Isopropyl Alcohol (IPA) were designated as the Targeted Chemicals of Concern (the TCOCs) .

The analytical results obtained for all the pollutants analyzed, including the TCOCs, were compared with EPA's published Regional Screening Levels (RSLs) which are concentration levels that are protective of human health and the environment.1 The analytical results did not exceed any of the RSLs. Refer to Tables 1 to 6 in this report. Therefore, based on the evaluation of the execution of the RFI WP, the July 21, 2020 Technical Letter from GET and the Laboratory Test Report prepared by EQ Lab, UNIPRO reached the following conclusions:

1. The RFI WP was executed as amended and approved by USEPA.
2. None of the soil analytical results show concentrations of contaminants above the applicable RSLs.
3. None of the VOCs, SVOCs, NHOs and TCOCs analytical results exceed the applicable RSL in any of the samples analyzed.

Based on the analytical results obtained from the sampling activities conducted to AOC #2, and the above mentioned conclusions, it is recommended that Fenwal requests from EPA and EPA issues to Fenwal a determination of "No Further Action" regarding AOC #2 because the RFI did not find any evidence that warrants additional investigation of the environmental conditions of AOC #2.

1 USEPA Regional Screening Levels, 2017. Copy of the tables with the RSLs is included in Appendix 8.

1.0 OBJECTIVE AND BACKGROUND

This section presents the objective of the Resource Conservation and Recovery Act Feasibility Investigation (RFI), the Fenwal International Inc. (Fenwal) Maricao site background, and a chronology of related activities.

1.1 Objective

The objective of the RFI is to determine if the presence of volatile organic compounds (VOCs),semi volatile organic compounds (SVOCs), and nonhalogenated organics (NHOs), including the Targeted Chemicals of Concern (TCOCs) which are Cyclohexanone, Methyl Ethyl Ketone (MEK), Dichloromethane (Methyl Chloride), and Isopropyl Alcohol, if any, in the soil adjacent to the four sides of the dike at area of concern (AOC #2) exceeds the applicable Regional Screening Levels (RSLs) established by the United States Environmental Protection Agency (USEPA or EPA).

1.2 Background

Fenwal operates a medical devices' manufacturing facility at two (2) properties owned by the Puerto Rico Industrial Development Company (PRIDCO), located at State Road PR-357, Km. 0.8, in the Municipality of Maricao, Puerto Rico (the Facility). The total surface area of the properties adds up to approximately 15.2 acres. The Facility includes two (2) main buildings with a total of approximately 100,000 square foot used for office, manufacturing, and related operations. The Facility was operated by Travenol Laboratories, Inc., until July 22, 1987, when the operator became Baxter Healthcare Corp. of Puerto Rico. In the year 2007, TPG, a group of investors, bought the Fenwal Division from Baxter Healthcare Corporation and in 2012, Fresenius Kabi bought Fenwal International from TPG. A Location Map for the Facility is included in Figure 1.

In 1988, the former Puerto Rico Environmental Quality Board (PREQB or EQB) conducted a RCRA Facility Assessment (the 1988 RFA) to two (2) Solid Waste Management Units (SWMUs) and five (5) AOCs. Refer to Attachment 2 in Appendix 2. The 1988 RFA recommended a sampling visit for AOC #2 referred to as a "Flammable

and Raw Material Storage Area", located in the backyard of the north side of plant #2. Refer to Table 2 for the location of AOC #2.

AOC #2 consisted of a steel building within a key-fenced area with a concrete floor with dimensions of 31' L X 20' W and surrounded by a curb 8" height X 6" wide, as described in the 1988 RFA. The physical description of AOC #2 has remained the same up to present day without any physical alteration. The description of AOC #2 contained in the 1988 RFA indicated that this area was used as a raw material storage area for Cyclohexanone, Methyl Ethyl Ketone, Isopropyl Alcohol, Chlorine and Dimethyl Chloride. AOC #2 was never used to store hazardous wastes. The AOC #2 is no longer used for the storage of flammable and the raw materials, but rather used for the storage of wooden pallets, PVC pipes, acrylic material, and galvanized tubes, which materials are to be used elsewhere in the Facility. At some point in time paper for recycling had also been stored inside AOC #2.

The 1988 RFA indicted that during the visual site investigation some stains on the soil located beneath the drainage of AOC #2 were observed and recommended that further investigation of this area be conducted through sampling and analysis activities.

In 2016, EPA conducted a review of the Facility's records under the RCRA Corrective Action Program. As part of this review, EPA did not find any sampling and analysis investigation of AOC #2 and determined that an RFI needed to be conducted in order to address the findings and recommendations contained in the 1988 RFA. Refer to Attachment 3 in Appendix 2.

Fenwal prepared an RFI Work Plan (the RFI WP). The RFI WP was reviewed and commented by EPA and its final version approved on October 10, 2019. Copy of EPA's approval letter is included in Appendix 1 and copy of the approved RFI WP is included in Appendix 2.

1.3 Schedule of the Execution of the RFI WP

After the RFI WP was approved by the EPA, Fenwal requested competitive proposals

from sampling companies and analytical laboratories. The sampling activities were awarded to GeoEnviroTech, Inc. (GET) and the analytical activities to EQ Lab, Inc. (EQ Lab). Both contractors were provided with copies of the RFI WP. Qualifications for GET are included in Appendix 9 and qualifications for EQ Lab in Appendix 10.

After the contractors completed the submittal to Fenwal of the documents required to complete the contracts, a joint field visit was conducted on March 5, 2020. The execution of the RFI WP was scheduled for April 7 and 8, 2020.

On March 15, 2020, an Executive Order (EO) was issued by the Governor of Puerto Rico declaring a state of emergency due to the COVID-19 Pandemic that ordered the lock-down of all citizens (except those dedicated to security, health care and similar works). Refer to OE-2020-023. The effectiveness of the EO has been extended through subsequent EOs issued by the Governor. Copies of all issued EOs are included in Appendix 3. Fenwal could not commence the works as scheduled.

Once a new EO was issued (OE-2020-038), copy of which is included in Appendix 3, that allowed for the reopening of operations, the field sampling activities were scheduled for June 4 and 5, 2020.

1.4 Approved amendments to the RFI WP

As a result of a field visit with GET, it was noted some physical limitations to locating the soil borings #4 and #5 on the east and south sides of AOC #2,due to existing concrete access ramp at each boring location. Therefore, soil boring #4 location had to be moved approximately 2 feet south of its original location and soil boring #5 location moved approximately 1 feet to the east of its original location. All new locations remained in the same spatial area of the original location. The EPA approved the relocation of the soil borings #4 and #5 on the south and east sides of AOC #2, respectively. Refer to Appendix 4 for copy of the proposed locations submitted to EPA and EPA's approval.

After reviewing and discussing the test methods specified in the RFI WP, EQ Lab

suggested using the analytical test Method 8260C for all parameters (VOCs, SVOCs and NHOs), instead of Method 8270 for the SVOCs. EPA was consulted and did not approve the use of analytical method 8260 for the SVOCs. As a result, EPA was notified that EQ Lab confirmed that it would use analytical method 8270 for the SVOCs as originally specified in the RFI WP and approved by EPA.

The correspondence between Fenwal and EPA regarding these amendments to the RFI WP consist of the following:

1) A letter from UNIPRO to EPA dated May 27, 2020, describing the proposed amendments;

2) A response email from Dr. David Cuevas on behalf of EPA, providing a discussion of its denial on the change in analytical methods;

3) A letter by UNIPRO dated June 1, 2020 memorializing the finally accepted amendments to the RFI WP; and

4) A letter from the EPA dated June 1, 2020 detailing the finally approved amendments to the RFI WP.

Copies of all correspondence between UNIPRO and EPA regarding the amendments to the RFI WP are included in Appendix 4.

Figure 1 Location Map of the Facilities

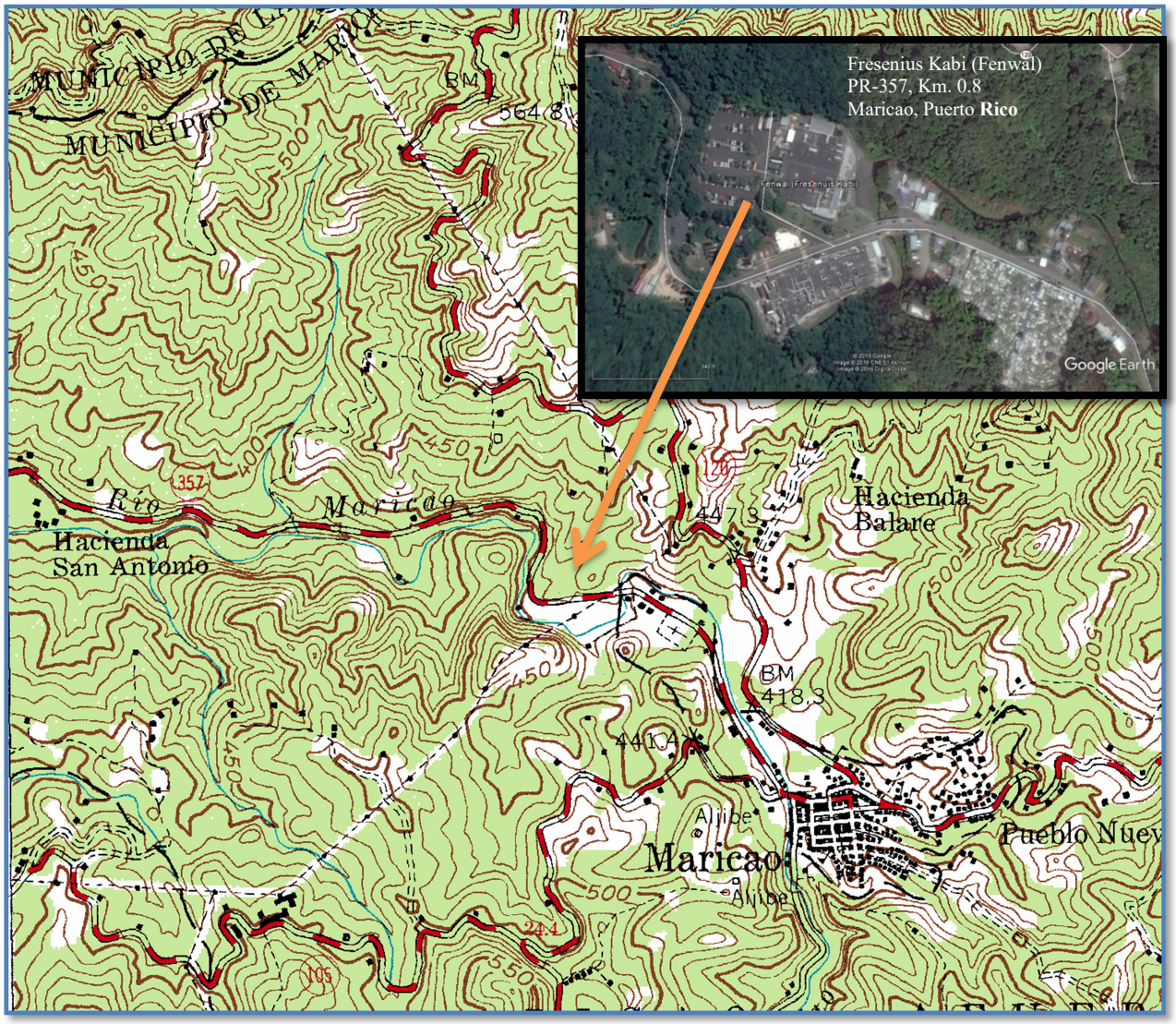

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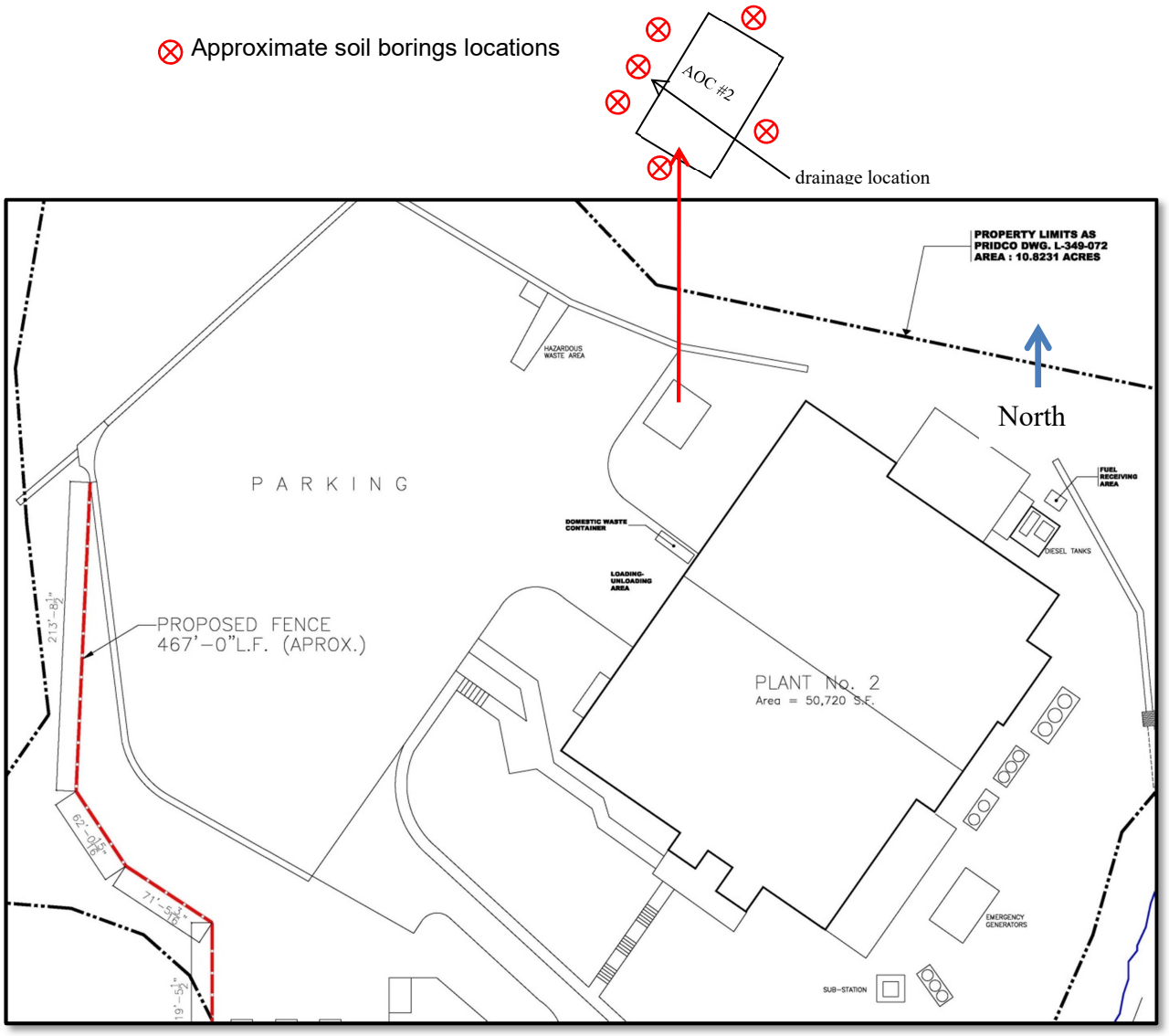
Figure 2 Location of Soil Borings around AOC #2



2.0 SAMPLING ACTIVITIES

This section presents a description of the field sampling activities conducted during June 4 and 5, 2020.

GET conducted the field sampling activities. Sampling locations for the six (6) soil borings were pre-determined in the RFI WP. The soil borings were identified by GET as SB-1 to SB-6. Soil borings SB-1 to SB-3 were located in the west side of AOC #2, that is, the side where the floor drain is located. Soil boring SB-4 was located at the south side of AOC #2, SB-5 was located on the east side and SB-6 was located on the north side.

Prior to performing the drilling activities, GET conducted an underground utility survey using a Ground Penetrating Radar (GPR) and Pipe/ Cable Locator. Refer to Appendix 6. Based on the utility sweep findings, borings identified as SB-1 and SB-5 were relocated due to the presence of underground utilities at the proposed locations. Refer to Appendix 6 for the final locations.

A total of five (5) soil borings were drilled within AOC #2 to a depth of ten (10) foot below existing ground surface. With regard to soil boring SB-5, shallow bedrock was found at five (5) foot below existing ground surface. After four (4) drilling attempts, this boring had to be relocated approximately 15 feet to the south of the original location to reach the 5 feet depth. The depth and relocation was consulted by phone by Rafael Toro, from UNIPRO, with Dr. David Cuevas, of EPA, on June 5, 2020, and Dr. Cuevas verbally authorized the depth and relocation.

Soil borings were advanced using a Geoprobe S400 truck- mounted unit. The direct push method consists of a hollow metallic cylinder to which force is applied by percussion and weight. Inside the metallic cylinder there is a plastic hollow cylinder in which penetrates the soil that will be retracted afterwards. This technique is used on unconsolidated materials and is affected by dense soils and competent rock, and did not result in any changes to the sampling plans.

Six (6) soil samples per boring were selected for laboratory analyses, which samples were collected every two (2) foot, except the first sample (surface sample), which was collected from 0 to 0.5 feet depth. These samples were collected from the following intervals:

- zero (0) to (0.5) feet,
- half (0.5) to two (2) feet,
- two (2) to four (4) feet,
- four (4) to six (6) feet,
- six (6) to eight (8) feet, and
- eight (8) to ten (10) feet.

Upon receiving the collected the soil core, GET logged the sample according to ASTM D2488 Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). A portion of each soil core was placed in Ziploc bags for field screening using an Organic Vapor Analyzer (OVA) equipped with a photo ionization detector (PID).

Samples were collected form the soil cores and placed in laboratory provided containers by EQ Lab. The containers were labeled with the soil boring identification number (ID), depth from which it was collected, date and time of collection. Samples were logged in the laboratory provided chain of custody and placed in coolers containing ice to keep a temperature of 4°C. Copies of the chain of custody completed at the field are included in Appendix 5.

Soil borings were grouted with neat cement/bentonite to prevent potential migration of contaminants from the surface, after the samples were collected for all the borings.

Soil cuttings were containerized in two 55-gallon steel UN-approved drums for later disposal at an industrial landfill. Sampling equipment was decontaminated with a low phosphate solution (Alkonox), tap water and distilled water. Fenwal will conduct TCLP testing for the soil cuttings in order to dispose of them. Based on the analytical reports, these cuttings are expected to be non-hazardous solid wastes. Fenwal will use a

licensed hauler for the disposal and will complete all required documentation. This has not been completed at the time of this report but can be documented to the EPA once completed, if requested.

The sampling activities are further described in the Technical Letter prepared by GET, dated July 21, 2020, and submitted to Fenwal, as part of its services. The Technical Letter includes field observations, figures with the locations of the borings, photographic documentation, field observations and notes, boring logs, and calibration data for the OVA- PID. Copy of the Technical Letter is included in Appendix 6. Summary of the most relevant matters contained in GET's letter have been included in this section.

3.0 ANALYTICAL ACTIVITIES

This section presents a description of the analytical activities conducted by EQ Lab, the analytical results, and UNIPRO's evaluation of the results as compared with the maximum concentrations reported and the RSLs.

In compliance with the RFI WP, all soil samples collected were analyzed for VOCs, SVOCs and NHOs. A total of 34 soil samples were analyzed, that is six (6) samples for soil borings SB-1 to SB-4 and SB-6 and only four (4) samples for soil boring SB-5 because of the rock encountered while drilling the boring. Each sample analyzed is identified with the boring number, the sample depth interval, the sampling time and day.

The results of the samples analyzed are included in the Laboratory Test Report prepared by EQ Lab. Refer to Appendix 7. The report is divided in two, one for each sampling day. The EQ Lab report also includes Quality Assurance and Quality Control (QA/QC) results including analysis of duplicate samples, the DI water used, equipment blanks, trip blanks, field blanks, matrix spikes, and the completed chain of custody forms. In addition, the Laboratory Test Report includes the EPA method used for each analysis, the units, detection limits, sample preparation methodology and the dates of collection and analysis.

The Laboratory Test Report is certified, signed and stamped by a chemist licensed to practice its profession in Puerto Rico.

All the analytical results were "not detected" or "ND", except for those identified in the following Tables 1 to 6. The analytical results where a contaminant was detected, the concentrations were compared with the corresponding RSL for an industrial soil obtained from USEPA Regional Screening Level (USEPA, 2017) and included in the RFI WP. Refer to Appendix 8. None of the concentration results exceed the applicable RSL.

Table 1 – Analytical results for contaminants detected and comparison with RSL in Soil Boring #1

Soil Boring #1			
Sampling Depth (ft.)	Contaminant	Result (µg/Kg)	RSL (µg/Kg)
0 to 0.5	2-Butanone (MEK)	25.7	1.9×10^8
	Acetone	691	6.7×10^8
	Ethylbenzene	6.5	2.5×10^4
	Naphtalene	2.3	N/A
	m.p-Xylene	39.7	2.4×10^6
	o-Xylene	11.5	2.8×10^6
	Isopropanol	296	2.4×10^7
0.5 to 2	2-Butanone (MEK)	15	1.9×10^8
	Acetone	214	6.7×10^8
	Isopropanol	322	2.4×10^7
2 to 4	Acetone	216	6.7×10^8
	Isopropanol	383	2.4×10^7
4 to 6	Acetone	85.9	6.7×10^8
	Isopropanol	212	2.4×10^7
4 to 6 (Duplicate)	Acetone	71.3	6.7×10^8
	Isopropanol	190	2.4×10^7
6 to 8	Acetone	158	6.7×10^8
	Isopropanol	429	2.4×10^7
8 to 10	Acetone	135	6.7×10^8
	Isopropanol	945	2.4×10^7

MEK = Methyl Ethyl Ketone

Table 2 – Analytical results for contaminants detected and comparison with RSL in Soil Boring #2

Soil Boring #2			
Sampling Depth (ft.)	Contaminant	Result (µg/Kg)	RSL (µg/Kg)
0 to 0.5	2-Butanone (MEK)	12.4	1.9×10^8
	Acetone	210	6.7×10^8
	Isopropanol	117	2.4×10^7
0.5 to 2	Acetone	132	6.7×10^8
	Isopropanol	295	2.4×10^7
2 to 4	Acetone	226	6.7×10^8
	Isopropanol	108	2.4×10^7
4 to 6	Acetone	146	6.7×10^8
	Isopropanol	156	2.4×10^7
6 to 8	Acetone	164	6.7×10^8
	Isopropanol	266	2.4×10^7
8 to 10	Acetone	208	6.7×10^8
	Isopropanol	193	2.4×10^7

MEK = Methyl Ethyl Ketone

Table 3 – Analytical results for contaminants detected and comparison with RSL in Soil Boring #3

Soil Boring #3			
Sampling Depth (ft.)	Contaminant	Result (µg/Kg)	RSL (µg/Kg)
0 to 0.5	2-Butanone (MEK)	25.4	1.9×10^8
	Acetone	468	6.7×10^8
	Isopropanol	364	2.4×10^7
0.5 to 2	2-Butanone (MEK)	24.6	1.9×10^8
	Acetone	427	6.7×10^8
	Isopropanol	132	2.4×10^7
2 to 4	2-Butanone (MEK)	16.3	1.9×10^8
	Acetone	360	6.7×10^8
	Isopropanol	344	2.4×10^7
2 to 4 (Duplicate)	2-Butanone (MEK)	14.3	1.9×10^8
	Acetone	295	6.7×10^8
	Isopropanol	351	2.4×10^7
4 to 6	2-Butanone (MEK)	25.8	1.9×10^8
	Acetone	338	6.7×10^8
	Dichloromethane ($MeCl_2$)	8.00	1.0×10^6
	Isopropanol	383	2.4×10^7
6 to 8	2-Butanone (MEK)	23.4	1.9×10^8
	Acetone	316	6.7×10^8
	Isopropanol	240	2.4×10^7
8 to 10	Acetone	92.4	6.7×10^8
	Isopropanol	97.9	2.4×10^7

MEK = Methyl Ethyl Ketone

Table 4 – Analytical results for contaminants detected and comparison with RSL in Soil Boring #4

Soil Boring #4			
Sampling Depth (ft.)	Contaminant	Result (µg/Kg)	RSL (µg/Kg)
0 to 0.5	Acetone	169	6.7×10^8
0.5 to 2	Acetone	268	6.7×10^8
2 to 4	Di(2-ethylhexyl)phthalate (DEHP)	24.7	1.6×10^5
	Acetone	327	6.7×10^8
	Isopropanol	163	2.4×10^7
4 to 6	Di(2-ethylhexyl)phthalate (DEHP)	31.6	1.6×10^5
	2-Butanone (MEK)	14.0	1.9×10^8
	Acetone	527	6.7×10^8
	Isopropanol	49.4	2.4×10^7
4 to 6 (Duplicate)	Di(2-ethylhexyl)phthalate (DEHP)	20.6	1.6×10^5
	2-Butanone (MEK)	14.3	1.9×10^8
	Acetone	462	6.7×10^8
	Isopropanol	48.4	2.4×10^7
6 to 8	2-Butanone (MEK)	15.7	1.9×10^8
	Acetone	687	6.7×10^8
8 to 10	Di(2-ethylhexyl)phthalate (DEHP)	29.0	1.6×10^5
	2-Butanone (MEK)	22.2	1.9×10^8
	Acetone	670	6.7×10^8
	Isopropanol	73.2	2.4×10^7

MEK = Methyl Ethyl Ketone

Table 5 – Analytical results for contaminants detected and comparison with RSL in Soil Boring #5

Soil Boring #5			
Sampling Depth (ft.)	Contaminant	Result (µg/Kg)	RSL (µg/Kg)
0 to 0.5	Di(2-ethylhexyl)phthalate (DEHP)	40.3	1.6×10^5
	Acetone	154	6.7×10^8
	Isopropanol	61.8	2.4×10^7
0.5 to 2	2-Butanone (MEK)	19.6	1.9×10^8
	Acetone	496	6.7×10^8
	Isopropanol	125	2.4×10^7
2 to 4	2-Butanone (MEK)	13.1	1.9×10^8
	Acetone	547	6.7×10^8
	Isopropanol	48.1	2.4×10^7
4 to 5	2-Butanone (MEK)	30.1	1.9×10^8
	Acetone	845	6.7×10^8
	Isopropanol	90.5	2.4×10^7

MEK = Methyl Ethyl Ketone

Table 6 – Analytical results for contaminants detected and comparison with RSL in Soil Boring #6

Soil Boring #6			
Sampling Depth (ft.)	Contaminant	Result (µg/Kg)	RSL (µg/Kg)
0 to 0.5	2-Butanone (MEK)	15.4	1.9×10^8
	Acetone	281	6.7×10^8
	Isopropanol	50.1	2.4×10^7
0.5 to 2	2-Butanone (MEK)	17.4	1.9×10^8
	Acetone	471	6.7×10^8
	Isopropanol	177	2.4×10^7
2 to 4	Acetone	459	6.7×10^8
4 to 6	Acetone	146	6.7×10^8
	Isopropanol	45.2	2.4×10^7
6 to 8	Acetone	137	6.7×10^8
	Isopropanol	55.1	2.4×10^7
8 to 10	Acetone	127	6.7×10^8
	Isopropanol	43.7	2.4×10^7

MEK = Methyl Ethyl Ketone

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the evaluation of the execution of the RFI WP, the July 21, 2020 Technical Letter from GET and the Laboratory Test Report prepared by EQ Lab, UNIPRO reached the following conclusions:

1. The RFI WP was executed as amended and approved by USEPA.
2. None of the soil analytical results show concentrations of contaminants above the applicable RSL.
3. None of the VOCs, SVOCs, NHOs and TCOCs analytical results exceed the applicable RSL in any of the samples analyzed.

4.2 Recommendations

Based on the analytical results obtained from the sampling activities conducted to AOC #2, and the above mentioned conclusions, it is recommended that Fenwal requests from EPA, and, then for EPA to issue a determination of “No Further Action” regarding AOC #2 to Fenwal since the RFI did not find any evidence that warrants additional investigation of the environmental conditions of AOC #2.

5.0 CERTIFICATION

I prepared this Report on behalf of Fenwal and certify that the information contained in the Report is true, accurate and complete, to the best of my knowledge and belief. As to those attachments to this Report that were not prepared by me, I certify that to the best of my knowledge and belief, they are also true, accurate and complete, and were prepared in accordance with procedures designed to assure that qualified personnel properly gathered, evaluated and submitted the information contained therein.

In San Juan, Puerto Rico, this August 18, 2020.

Rafael A. Toro Ramírez, P.E.

Digitally signed by Rafael Toro Ramirez
DN: c=US, st=Puerto Rico, o=Colegio de Ingenieros y Agrimensores de Puerto Rico, title=8737 PE, cn=Rafael Toro Ramirez, email=rtoror@bioesign.com
Date: 2020.08.18 15:19:24 -04'00'

6.0 REFEERENCES

USEPA 2017 Regional Screening Level Tables

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ESTAMPILLA DIGITAL ESPECIAL (EDE)

Ing. Rafael A Toro Ramirez, PE

Digitally signed by Rafael Toro Ramirez
DN: c=US, st=Puerto Rico, o=Colegio de Ingenieros y Agrimensores de Puerto Rico, title=8737 PE, cn=Rafael Toro Ramirez, email=rtoror@bioesign.com
Date: 2020.08.18 15:07:51 -04'00'

SELLO PROFESIONAL

Práctica de:	Ingeniería
Licencia:	8737
Renglón:	Servicio Profesional
Descripción del Trabajo:	Investigaciones
Fecha de Emisión:	2020-08-18
Monto Emitido:	$14
Número de Serie:	2927-9906-1117-3675
Número de Caso:	FENWAL MARICAO
Proyecto / Unidad:	FENWAL MARICAO
Rol del Profesional:	Consultor

Certificación:

El profesional certifica con la emisión de la estampilla digital especial del Colegio de Ingenieros y Agrimensores de Puerto Rico el haber cumplido con las disposiciones de la Sección 11 de la Ley 319 del 15 de mayo de 1938, según enmendada.

La colocación del sello profesional constituye la cancelación de la estampilla digital especial