Table 2-4. Attenuation Monitoring Point Well Data Summary, 2022 Annual Event

2022 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

		Analyte Group (Method):	**Volatile Organic Compounds (SW8260D)**						
		CAS:	**75-34-3**	**75-35-4**	**107-06-2**	**156-59-2**	**127-18-4**	**79-01-6**	**75-01-4**
		Analyte:	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**cis-1,2-Dichloroethene**	**Tetrachloroethene**	**Trichloroethene**	**Vinyl Chloride**
		AAL	**4.9 [a]**	**2.40**	**0.021**	**0.438**	**0.582**	**0.836**	**0.480**
Well ID	**Well Type**	**Date Collected**							
MW-50R	AMP	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-181	AMP	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-182	AMP	12/14/2022	**0.00255**	**0.0143**	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638

Notes:

The concentrations are presented in milligrams per liter (mg/L).

Bold values indicate a detected concentration.

[a] The AAL for 1,1-dichloroethane is the lower of the ${}^{GW}GW_{Ing}$ and ${}^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January 2021).

< = nondetected result less than the sample detection limit

AAL = attenuation action level

AMP = attenuation monitoring point

CAS = Chemical Abstracts Service

${}^{GW}GW_{Ing}$ = groundwater ingestion pathway

${}^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater

ID = identification

MW = monitor well

PCL = protective concentration level

R = replacement well

Table 2-5. Point of Exposure Well Data Summary, 2022 Annual Event

2022 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

		Analyte Group (Method):	Volatile Organic Compounds (SW8260D)						
		CAS:	75-34-3	75-35-4	107-06-2	156-59-2	127-18-4	79-01-6	75-01-4
		Analyte:	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloroethane	cis-1,2-Dichloroethene	Tetrachloroethene	Trichloroethene	Vinyl Chloride
		cPCL:	4.9	0.007	0.005	0.07	0.005	0.005	0.002
Well ID	**Well Type**	**Date Collected**							
MW-01	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-15R	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-16R	POE	12/15/2022	**0.025**	**0.0351**	< 0.00059	**0.00403**	**0.0392**	**0.00823**	**0.00301**
MW-17R	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-65	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-70	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-71	POE	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-74	POE	12/14/2022	**0.00439**	**0.00318**	< 0.00059	**0.0192**	**0.00118**	< 0.000791	**0.00673**
MW-76	POE	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-77	POE	1/3/2023	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-83	POE	12/15/2022	**0.0193**	**0.142 J**	**0.00142**	**0.013**	**0.117 J**	**0.00966**	**0.00269**
MW-88	POE	12/15/2022	**0.00541**	**0.0279**	< 0.00059	**0.00182**	**0.0243**	**0.0037 J**	< 0.000638
MW-89	POE	12/15/2022	**0.0118**	**0.254**	**0.00353**	**0.00246**	**0.00139**	**0.0218**	< 0.000638
MW-90	POE	12/15/2022	**0.041**	**0.139**	< 0.00059	**0.00263**	**0.0399**	**0.00554**	< 0.000638
MW-92	POE	12/15/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-93R	POE	12/16/2022	**0.00669**	**0.0401**	< 0.00059	**0.00301**	**0.186**	**0.0168**	< 0.000638
MW-97	POE	12/15/2022	**0.006**	**0.0378**	**0.0013**	**0.00707**	**0.205**	**0.0228**	< 0.000638
MW-98	POE	12/15/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-100	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-106	POE	12/15/2022	< 0.000635	< 0.000738	< 0.00059	**0.00176**	< 0.000801	< 0.000791	< 0.000638
MW-108	POE	12/14/2022	**0.00379**	**0.0344**	< 0.00059	**0.0038**	< 0.000801	**0.00957**	< 0.000638
MW-109	POE	12/14/2022	**0.0406**	**0.02**	< 0.00059	**0.0218**	**0.0124**	**0.00307 J**	**0.0139**
MW-110	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-111	POE	12/14/2022	**0.00272**	**0.00485**	< 0.00059	**0.00234**	**0.0151**	**0.00397 J**	< 0.000638
MW-112	POE	12/14/2022	**0.00928**	**0.0157**	**0.00203**	< 0.000714	< 0.000801	< 0.000791	**0.00454**
MW-113	POE	12/14/2022	**0.0192**	**0.0431**	< 0.00059	**0.0185**	**0.0979 J**	**0.0432**	**0.00256**
MW-121	POE	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-122	POE	12/15/2022	**0.00087 J**	**0.0127**	< 0.00059	< 0.000714	**0.00099 J**	< 0.000791	< 0.000638
MW-145	POE	12/16/22	NS	NS	NS	NS	NS	NS	NS

Table 2-5. Point of Exposure Well Data Summary, 2022 Annual Event

2022 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

		Analyte Group (Method):	**Volatile Organic Compounds (SW8260D)**						
		CAS:	**75-34-3**	**75-35-4**	**107-06-2**	**156-59-2**	**127-18-4**	**79-01-6**	**75-01-4**
		Analyte:	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**cis-1,2-Dichloroethene**	**Tetrachloroethene**	**Trichloroethene**	**Vinyl Chloride**
		cPCL:	**4.9**	**0.007**	**0.005**	**0.07**	**0.005**	**0.005**	**0.002**
Well ID	**Well Type**	**Date Collected**							
MW-146	POE	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-147	POE	12/16/2022	**0.000998 J**	**0.00163**	< 0.00059	**0.00233**	**0.00536**	**0.00114 J**	< 0.000638
MW-160	POE	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-161	POE	12/16/2022	**0.00668**	**0.0334**	< 0.00059	**0.0012**	**0.00327**	**0.00103 J**	< 0.000638
MW-162	POE	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-163	POE	12/16/2022	**0.0142**	**0.0337**	< 0.00059	**0.00662**	**0.00809**	**0.00468 J**	**0.00213**
MW-168	POE	12/15/2022	**0.00517**	**0.0214**	**0.00137**	**0.0118**	**0.152**	**0.0279**	< 0.000638
MW-178	POE	12/14/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-179	POE	12/15/2022	< 0.000635	**0.00526**	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
MW-180	POE	1/3/2023	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638

Notes:

The concentrations are presented in milligrams per liter (mg/L).

The cPCLs are the lower of the ${}^{GW}GW_{Ing}$ and ${}^{Air}GW_{Inh\text{-}V}$ Tier I PCLs for residential land use based on the latest PCL tables (January 2021).

Bold values indicate a detected concentration.

Bold and shaded values exceed the cPCL.

< = nondetected result less than the sample detection limit

${}^{GW}GW_{Ing}$ = groundwater ingestion pathway

${}^{Air}GW_{Inh\text{-}V}$ = inhalation of volatiles from groundwater

CAS = Chemical Abstracts Service

cPCL = critical protective concentration level

ID = identification

J = estimated concentration

NS = not sampled

MW = monitor well

PCL = protective concentration levels

POE = point of exposure

R = replacement well

Table 2-6. Surface Water Data Summary, 2022 Annual Event

2022 Annual Response Action Effectiveness Report

Former Cameron Iron Works Facility, Houston, Texas

		Analyte Group (Method):	**Volatile Organic Compounds (SW8260D)**						
		CAS:	**75-34-3**	**75-35-4**	**107-06-2**	**156-59-2**	**127-18-4**	**79-01-6**	**75-01-4**
		Analyte:	**1,1-Dichloroethane**	**1,1-Dichloroethene**	**1,2-Dichloroethane**	**cis-1,2-Dichloroethene**	**Tetrachloroethene**	**Trichloroethene**	**Vinyl Chloride**
		cPCL (Surface Water):	**4.1**	**0.05**	**0.443**	**7.49**	**0.632**	**0.888**	**0.0269**
Well ID	**Well Type**	**Date Collected**							
SWD-12	HCFCD	12/19/2022	**0.00103**	**0.00441**	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
SWD-14	HCFCD	12/19/2022	**0.00193**	**0.00888**	< 0.00059	**0.000998 J**	**0.000901 J**	**0.00146 J**	< 0.000638
SWD-15	HCFCD	12/19/2022	**0.00159**	**0.0107**	< 0.00059	< 0.000714	< 0.000801	**0.00121 J**	< 0.000638
SWD-17	HCFCD	12/19/2022	< 0.000635	**0.00591**	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638
SWD-18	HCFCD	12/19/2022	< 0.000635	**0.00182**	< 0.00059	< 0.000714	**0.00101**	< 0.000791	< 0.000638
SWD-20	HCFCD	12/16/2022	< 0.000635	< 0.000738	< 0.00059	< 0.000714	< 0.000801	< 0.000791	< 0.000638

Notes:

The concentrations are presented in milligrams per liter (mg/L).

The cPCLs for surface water are 80% of the cPCLs calculated in the *Human Health Ecological Risk Assessment for Surface Water and Sediment* (June 2003).

Bold values indicate a detected concentration.

< = nondetected result less than the sample detection limit

CAS = Chemical Abstracts Service

cPCL = critical protective concentration level

HCFCD = Harris County Flood Control Ditch

ID = identification

J = estimated concentration

SWD = surface water sampling locations