ARCO Recycling, 1705 Noble Road

Ambient Air Sampling Results-Volatile Organic Compounds(VOCs)

January 31, 2017- December 20, 2017

24 Hour Residential Sampling Results

Compound list	Average (1/2mdl)**	Minimum	Maximum	Count***	Short-term Screening Values	Source
	ppb	ppb	ppb		ppb	
Acetone	3.71	BDL	9.03	75	13,000	MRLs (intermed.)
Acrolein****	0.29	BDL	0.87	8	0.04	MRLs (intermed.)
Benzene	0.27	0.10	1.77	86	6	MRLs (intermed.)
n-Butane	1.56	0.45	6.19	81	18,000	MAGLC
1,3 Butadiene	0.05	BDL	0.10	1	10,000	ERPG-1
2-Butanone	0.32	BDL	1.39	15	200,000	AEGL-1
Carbon tetrachloride	0.06	BDL	0.13	19	30	MRLs (intermed.)
Chloromethane	0.69	0.40	4.56	87	200	MRLs (intermed.)
Cyclohexane	0.05	BDL	0.12	2	2,400	MAGLC
Dichlorodifluoromethane	0.54	0.38	0.78	85	24,000	MAGLC
Ethanol	4.69	BDL	21.50	84	1,800,000	MAGLC
Ethyl Acetate	0.06	BDL	0.30	4	9,500	MAGLC
Ethyl Benzene	0.07	BDL	0.31	14	2,000	MRLs (intermed.)
n-Heptane	0.07	BDL	0.24	20	10,000	MAGLC
Hexane	0.23	BDL	0.74	78	1,190	MAGLC
Hexachlorobutadiene	0.05	BDL	0.25	1	1,000	ERPG-1
2-Hexanone	0.05	BDL	0.12	1	120	MAGLC
Isopropyl alcohol	0.74	BDL	6.07	49	5,000	MAGLC
Methyl methacrylate	0.07	BDL	0.77	4	17,000	AEGL-1
4-Methyl-2-pentanone	0.05	BDL	0.18	2	476	MAGLC
Methylene chloride	0.10	BDL	0.56	50	300	MRLs (intermed.)
Naphthalene	0.11	BDL	0.25	6	240	MAGLC
n-Pentane	0.74	0.15	2.63	87	14,286	MAGLC
Propylene	0.65	0.28	3.20	87	11,905	MAGLC
Styrene	0.07	BDL	0.57	8	200	MRL(chronic)*
Tetrachloroethylene	0.10	BDL	0.29	4	6	MRLs (intermed.)
Trichloroethene	0.05	BDL	0.11	1	0.4	MRLs (intermed.)
Toluene	0.41	0.10	1.25	86	1000	MRL(chronic)*
Trichlorofluoromethane	0.28	0.16	1.04	87	24,000	MAGLC
1,1,2-Trichloro-1,2,2-	0.10	BDL	0.10	3	24,000	MAGLC
1,2,4-Trimethylbenzene	0.08	BDL	0.28	30	595	MAGLC
2,2,4-Trimethylpentane	0.12	BDL	0.44	10	7,143	MAGLC
Vinyl acetate	0.13	BDL	0.58	13	10	MRLs (intermed.)
o-Xylene	0.07	BDL	0.25	19	600	MRLs (intermed.)
Total m&p-xylenes	0.17	BDL	0.61	32	600	MRLs (intermed.)

BDL= below detection limits

ATSDR Minimum Risk Level (MRLs)

AEGL-1 = Acute exposure guideline levels for mild effects

MAGLC= TLV/42

*MRL(chronic)-No intermediate value available.

** Average (½ method detection limit): The arithmetic mean (average) listed uses one-half of the method detection limit (1/2 MDL) as the numerical value for non-detected compounds when computing the average of multiple sampling events. This method is standard practice to estimate averages with non-detected values.

Method Detection limit: The method detection limit is the lowest measurement the collection / analysis procedure can accurately quantify as a true measurement of the ambient air concentration.

*** Count: Total detections out of 87 sampling events (other samples were below detection limits)

**** Acrolein: Sample results for Acrolein are suspect. This compound can be created within the sample canister itself: U.S. EPA is refining the test method to correct for this problem.

ARCO Recycling, 1705 Noble Road						
Ambient Air Sampling Results-Volatile Organic Compounds(VOCs)						
	October 28, 2017- December 20, 2017					
	24 Hour Offsite-Residence Sampling Results					
Compound list	**Average (1/2mdl)****	**Minimum**	**Maximum**	**Count*****	**Short-term Screening Values**	**Source**
	ppb	**ppb**	**ppb**			
1,2,4-Trimethylbenzene	0.07	BDL	0.21	5	595	MAGLC
2,2,4-Trimethylpentane	0.11	BDL	0.24	1	7,143	MAGLC
Acetone	2.47	BDL	4.32	20	13000	MRLs (intermed.)
Benzene	0.21	BDL	0.43	24	6	MRLs (intermed.)
Carbon tetrachloride	0.06	BDL	0.11	6	30	MRLs (intermed.)
Chloromethane	0.62	0.53	0.76	25	200	MRLs (intermed.)
Cyclohexane	0.05	BDL	0.16	1	2,400	MAGLC
Dichlorodifluoromethane	0.52	0.44	0.60	25	24,000	MAGLC
Ethanol	4.64	1.64	12.40	25	1,800,000	ERPG-1
Ethylbenzene	0.06	BDL	0.15	4	2,000	MRLs (intermed.)
Hexane	0.21	BDL	0.54	22	1,190	MAGLC
Isopropyl alcohol	0.34	BDL	0.81	4	5,000	MAGLC
Methyl methacrylate	0.10	BDL	0.10	2	17,000	AEGL-1
Methylene chloride	0.08	BDL	0.12	9	300	MRLs (intermed.)
Naphthalene	0.14	BDL	0.37	5	240	MAGLC
n-Butane	1.82	0.37	4.61	25	18,000	MAGLC
n-Heptane	0.07	BDL	0.18	5	10,000	MAGLC
n-Pentane	0.74	0.12	1.70	25	14,286	MAGLC
o-Xylene	0.07	BDL	0.20	5	600	MRLs (intermed.)
Propylene	0.63	BDL	1.14	24	11,905	MAGLC
Styrene	0.05	BDL	0.14	1	200	MRL(chronic)*
Toluene	0.32	0.10	1.21	24	2,000	MRLs (acute)*
Total m&p-xylenes	0.15	BDL	0.49	6	600	MRLs (intermed.)
Trichlorofluoromethane	0.24	0.16	0.34	25	24,000	MAGLC
Vinyl acetate	0.11	BDL	0.33	1	10	MRLs (intermed.)
BDL= below detection limits						
ATSDR Minimum Risk Level (MRLs)						
***MRL(acute)-**No intermediate value available.						
ERPG-Emergency Response Planning Guidelines.The first tier (e.g., ERPG-1) is a temporary, non-disabling						
AEGL-1 = Acute exposure guideline levels for mild effects						
MAGLC= TLV/42						

** Average (½ method detection limit): The arithmetic mean (average) listed uses one-half of the method detection limit (1/2 MDL) as the numerical value for non-detected compounds when computing the average of multiple sampling events. This method is standard practice to estimate averages with non-detected values.

Method Detection limit: The method detection limit is the lowest measurement the collection / analysis procedure can accurately quantify as a true measurement of the ambient air concentration.

*** Count: Total detections out of 25 sampling events (other samples were below detection limits)

ARCO Recycling, 1705 Noble Road						
Ambient Air Sampling Results-Volatile Organic Compounds(VOCs)						
	January 31, 2017-December 20, 2017					
	24 Hour Upwind Sampling Results					
Compound list	**Average (1/2mdl)****	**Minimum**	**Maximum**	**Count*****	**Short-term Screening Values**	**Source**
	ppb	**ppb**	**ppb**		**ppb**	
Acetone	3.83	BDL	10.80	72	13,000	MRLs (intermed.)
Acrolein*	0.30	BDL	0.74	11	0.04	MRLs (intermed.)
Benzene	0.24	0.10	0.85	85	6	MRLs (intermed.)
1,3-Butadiene	0.05	BDL	0.20	2	10,000	ERPG-1
n-Butane	1.63	0.31	5.31	76	18,000	MAGLC
2-Butanone	0.32	BDL	1.06	15	200,000	AEGL-1
Carbon tetrachloride	0.06	BDL	0.11	15	30	MRLs (intermed.)
Chloromethane	0.64	0.37	1.02	86	200	MRLs (intermed.)
Cyclohexane	0.05	BDL	0.12	1	2,400	MAGLC
1,2-Dichlorobenzene	0.05	BDL	0.14	1	595	MAGLC
1,3-Dichlorobenzene	0.05	BDL	0.11	1	NA	
1,4-Dichlorobenzene	0.05	BDL	0.13	1	200	MRLs (intermed.)
Dichlorodifluoromethane	0.55	0.41	0.79	86	24,000	MAGLC
Ethanol	4.28	BDL	14.70	84	1,800,000	MAGLC
Ethyl acetate	0.06	BDL	0.49	6	9,500	MAGLC
Ethylbenzene	0.06	BDL	0.15	6	2,000	MRLs (intermed.)
n-Heptane	0.06	BDL	0.31	15	10,000	MAGLC
Hexachlorobutadiene	0.06	BDL	0.81	1	1,000	ERPG-1
Hexane	0.20	BDL	0.58	73	1,190	MAGLC
2-Hexanone	0.05	BDL	0.48	1	120	MAGLC
Isopropyl alcohol	0.94	BDL	7.49	47	5,000	MAGLC
Methyl methacrylate	0.07	BDL	0.72	5	17,000	AEGL-1
Methylene chloride	0.09	BDL	0.42	49	300	MRLs (intermed.)
4-Methyl-2-pentanone	0.05	BDL	0.15	1	476	MAGLC
Naphthalene	0.12	BDL	0.81	5	240	MAGLC
n-Pentane	0.64	0.11	1.98	86	14,286	MAGLC
Propylene	0.75	0.25	2.80	85	11,905	MAGLC
Styrene	0.07	BDL	0.60	6	200	MRL(chronic)*
Toluene	0.36	BDL	1.83	84	1000	MRL(chronic)*
Tetrachloroethylene	0.05	BDL	0.28	3	6	MRLs (intermed.)
Trichlorofluoromethane	0.25	0.14	0.59	86	24,000	MAGLC
1,2,4-Trichlorobenzene	0.26	BDL	0.74	1	88	MAGLC
1,2,4-Trimethylbenzene	0.08	BDL	0.29	28	595	MAGLC
2,2,4-Trimethylpentane	0.12	BDL	0.35	8	7,143	MAGLC
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.05	BDL	0.11	2	24000	MAGLC
Vinyl acetate	0.14	BDL	0.70	12	10	MRLs (intermed.)
o-Xylene	0.06	BDL	0.20	11	600	MRLs (intermed.)
Total m&p-xylenes	0.14	BDL	0.47	17	600	MRLs (intermed.)

BDL= below detection limits

ATSDR Minimum Risk Level (MRLs)

AEGL-1 = Acute exposure guideline levels for mild effects

ERPG-Emergency Response Planning Guidelines.The first tier (e.g., ERPG-1) is a temporary, non-disabling effects

MAGLC= TLV/42

*MRL/IRIS (chronic)-No intermediate value available.

** Average (½ method detection limit): The arithmetic mean (average) listed uses one-half of the method detection limit (1/2 MDL) as the numerical value for non-detected compounds when computing the average of multiple sampling events. This method is standard practice to estimate averages with non-detected values.

Method Detection limit: The method detection limit is the lowest measurement the collection / analysis procedure can accurately quantify as a true measurement of the ambient air concentration.

*** Count: Total detections out of 86 sampling events (other samples were below detection limits)

**** Acrolein: Sample results for Acrolein are suspect. This compound can be created within the sample canister itself: U.S. EPA is refining the test method to correct for this problem.

ARCO Recycling, 1705 Noble Road

Ambient Air Sampling Results-Volatile Organic Compounds(VOCs)

January 31, 2017-December 20, 2017

24 Hour Downwind Sampling Results

Compound list	Average (1/2mdl)**	Minimum	Maximum	Count***	Short-term Screening Values	Source
	ppb	ppb	ppb		ppb	
Acetone	4.79	BDL	24.10	81	13,000	MRLs (intermed.)
Acrolein****	0.40	BDL	5.94	11	0.04	MRLs (intermed.)
Benzene	0.97	BDL	29.10	85	6	MRLs (intermed.)
1,3-Butadiene	0.24	BDL	12.30	4	10,000	ERPG-1
n-Butane	1.50	BDL	5.76	83	18,000	MAGLC
2-Butanone	0.48	BDL	5.50	25	200,000	AEGL-1
Bromomethane	0.05	BDL	0.47	1	50	MRLs (intermed.)
Carbon disulfide	0.25	BDL	1.03	1	1,000	ERPG-1
Carbon tetrachloride	0.07	BDL	0.25	18	30	MRLs (intermed.)
Chlorobenzene	0.05	BDL	0.13	2	10,000	AEGL-1
Chloroethane	0.06	BDL	0.56	3	3,789	IRIS(chronic)*
Chloromethane	2.38	BDL	61.00	87	200	MRLs (intermed.)
Cumene	0.06	BDL	0.63	3	50,000	AEGL-1
Cyclohexane	0.05	BDL	0.12	2	2,400	MAGLC
1,4-Dioxane	0.10	BDL	0.20	1	200	MRLs (intermed.)
Dichlorodifluoromethane	0.63	0.38	2.76	88	24,000	MAGLC
Ethanol	4.33	BDL	15.40	78	1,800,000	MAGLC
Ethyl acetate	0.06	BDL	0.45	8	9,500	MAGLC
Ethylbenzene	0.21	BDL	5.37	15	2,000	MRLs (intermed.)
4-Ethyltoluene	0.06	BDL	0.37	3	NA	
n-Heptane	0.10	BDL	1.17	17	10,000	MAGLC
Hexane	0.23	BDL	1.90	74	1,190	MAGLC
2-Hexanone	0.05	BDL	0.13	2	120	MAGLC
Isopropyl alcohol	0.84	BDL	7.12	45	5,000	MAGLC
Methylene chloride	0.10	BDL	0.25	50	300	MRLs (intermed.)
Methyl methacrylate	0.09	BDL	1.44	11	17,000	AEGL-1
4-Methyl-2-pentanone	0.05	BDL	0.12	4	476	MAGLC
Naphthalene	0.15	BDL	2.34	9	240	MAGLC
n-Nonane	0.06	BDL	0.59	6	4,762	MAGLC
n-Pentane	0.77	BDL	6.14	85	14,286	MAGLC
Propylene	1.78	BDL	57.50	83	11,905	MAGLC
n-Propylbenzene	0.06	BDL	0.32	4	NA	
Styrene	0.22	BDL	5.70	16	200	MRL(chronic)*
Tetrahydrofuran	0.20	BDL	2.82	10	1190	MAGLC
Tetrachloroethylene	0.07	BDL	0.92	3	6	MRLs (intermed.)
Toluene	0.71	BDL	11.80	80	1000	MRL(chronic)*
Trichloroethene	0.05	BDL	0.12	1	0.4	MRLs (intermed.)
Trichlorofluoromethane	0.35	0.15	1.52	88	24,000	MAGLC
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.06	BDL	0.55	5	24,000	MAGLC
1,3,5-Trimethylbenzene	0.15	BDL	5.22	3	595	MAGLC
1,2,4-Trimethylbenzene	0.16	BDL	6.25	33	595	MAGLC
2,2,4-Trimethylpentane	0.11	BDL	0.33	6	7,143	MAGLC
Vinyl acetate	0.20	BDL	5.13	15	10	MRLs (intermed.)
o-Xylene	0.11	BDL	1.32	16	600	MRLs (intermed.)
Total m&p-xylenes	0.28	BDL	6.28	27	600	MRLs (intermed.)

BDL= below detection limits

ATSDR Minimum Risk Level (MRLs)

ERPG-Emergency Response Planning Guidelines.The first tier (e.g., ERPG-1) is a temporary, non-disabling effects threshold

AEGL-1 = Acute exposure guideline levels for mild effects

MAGLC= TLV/42

*MRL/IRIS (chronic)-No intermediate value available.

** Average (½ method detection limit): The arithmetic mean (average) listed uses one-half of the method detection limit (1/2 MDL) as the numerical value for non-detected compounds when computing the average of multiple sampling events. This method is standard practice to estimate averages with non-detected values.

Method Detection limit: The method detection limit is the lowest measurement the collection / analysis procedure can accurately quantify as a true measurement of the ambient air concentration.

*** Count: Total detections out of 88 sampling events (other samples were below detection limits)

**** Acrolein: Sample results for Acrolein are suspect. This compound can be created within the sample canister itself: U.S. EPA is refining the test method to correct for this problem.

ARCO Recycling, 1706 Noble Road

Ambient Air Sampling Results-Reduced Sulfur Compounds

January 25, 2017- December 18, 2017

24 Hour Downwind Samples Results

Client Sample ID:		EPA 15M73004-20385-11HR	EPA 15T73178/TB-11HR	EPA 15T73723/TB-11HR	EPA 15M73/SN-20385-24HR	EPA 15M73/SN-20385-24HR	EPA 15T73178/SN-11HR	EPA15T73723/SN1-11HR	EPA 15M73/SN-20385-24HR	EPA 15M73/SN2-24HR	EPA 15T73178/SN2-11HR	EPA 15T73723/SN2-11HR	EPA 15T73178/SN3-11HR	EPA 15T73723/SN3-11HR	EPA 15M73/SN3-24HR	EPA 15M73/SN4-24HR	EPA 15T73178/SN4-11HR	EPA 15T73723/SN4-11HR	EPA 15M73/SN5-24HR	EPA 15T73178/SN5-11HR	EPA 15T73723/SN5-11HR	EPA 15T73178/SN6-11HR	EPA 15T73723/SN6-11HR	EPA15-12522-Downwind-24HR	EPA 027129-Downwind-24HR	EPA 028201-Downwind-24HR	EPA 027131-Downwind-24HR	EPA 027132-Downwind-24HR	EPA 028382-Downwind-24HR	EPA 028368-Downwind-24HR	EPA 028370-Downwind-24HR	EPA027705	EPA 028378-Downwind-24HR	EPA 027133	EPA028370-Downwind-24HR	Carcicin® EPA027771 - Downwind-24HR	EPA 027701-Downwind-11HR	EPA 028372-Downwind-24HR	EPA 028385-Downwind-24HR	EPA 028368-Downwind-24HR	Short-term Screening Values	Source
DAT Sample ID:		15-7008-1	157008-1	157012-1	157013-1	157015-1	157017-1	157018-1	157019-1	157020-1	157021-1	157022-1	157023-1	157024-1	157025-1	157026-1	157027-1	157028-1	157029-1	157030-1	157031-1	157032-1	157033-1	157034-1	157035-1	157036-1	157037-1	157038-1	157039-1	157040-1	157041-1	157042-1	157043-1	157044-1	157045-1	157046-1	157047-1	157048-1	157049-1	157050-1	157051-1	157052-1	157053-1		
Date Analyzed:		01/25/17-01/26/17	01/31/2017-01/31/2017	01/07/2017-01/08/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017	01/31/2017-02/01/2017		
	CAS #	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**	**ppb**
Methanethiol, methyl	74-93-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	70	
Ethanethiol, ethyl	75-08-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20,000	AEGL 2
Dimethyl sulfide	75-18-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,300	AEGL 2
Ethyl mercaptan	75-08-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000	AEGL 2
Dimethyl disulfide	75-18-3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000	
Carbon disulfide	75-15-0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1000	ERMG-1
Ethyl Methyl sulfide	75-18-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2-Propyl mercaptan	107-03-9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2-Butyl mercaptan	109-79-5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Diethyl disulfide	75-18-1	ND	ND	ND	0.2	0.187	NR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	EPRG1

ARCO Recycling Asbestos Results

May 5, 2017-December 13, 2017

Sample Decription		PCM upwind	PCM downwind	0.8 um PCM filter	0.8 um PCM filter	East end Resident.	West end Resident.					
Laboratory Sample ID		1701676 -1	1701676 -2	1702819 -1	1702819 -2	1702819 -1	1702819 -2	1703014 -1	1703014 -2	1703160 -1	1703160-2	1703219 -1
Client ID				Site #1 CQ796484	Site #2 CQ796334	Site #1 CO796243	Site #2 CO796122	- Site #1 CQ796036	Site #2 CQ796384	Site #1 CQ795984	Site #2 CQ796387	Site #1 (CQ796436)
Date Collected		5/5/2017	5/5/2017	7/19/2017	7/19/2017	7/27/2017	7/27/2017	8/1/2017	8/1/2017	8/10/2017	8/10/2017	8/15/2017
Fiber Concentration	**(f/cc)**	<0.01	<0.01	0.011	0.008	0.008	0.009	0.008	<0.01	<0.01	<0.01	<0.01

Laboratory Sample ID	1703219 -2	1703344 -1	1703344 -2	1703487 -1	1703487 -2	1703545 -1	1703545 -2	1703706 -1	1703706 -2	1703823 -1	1703823 -2
Client ID	Site #2 (CQ796025)	Site #1 (CQ795929)	Site #2 (CQ796061)	Site #1 (CS334674)	Site #2 (CS334638)	Site #1 (CS334458)	Site #2 (CS334478)	Site #1 (CS334406)	Site #2 (CS334437)	Site #1 CS334393)	Site #2 (CS334374)
Date Collected	8/15/2017	8/23/2017	8/23/2017	8/31/2017	8/31/2017	9/5/2017	9/5/2017	9/13/2017	9/13/2017	9/21/2017	9/21/2017
Fiber Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	<0.01	<0.01

Laboratory Sample ID	1704090 -1	1704090 -2	1704193 -1	1704193 -2	1704266 -1	1704266 -2	1704193 -1	1704193 -2	1704537 -1	1704537 -2	1704684 -1
Client ID	Site #1 (CQ795974)	Site #2 (CS334597)	Site #1 (CS334390)	Site #2 (CS334421	site#1	Site#2	Site #1 (CS334454)	Site #2 (CS334400)	Site #1 (CS334395)	Site #2 (CS334737)	Site #1 (CS33481)
Date Collected	10/4/2017	10/4/2017	10/12/2017	10/12/2017	10/16/2017	10/16/2017	10/24/2017	10/24/2017	11/1/2017	11/1/2017	11/9/2017
Fiber Concentration	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Laboratory Sample ID	1704684 -2	17044719 -1	1704719 -2	1704904 -1	1704904 -2	1704967 -1	1704967 -2	1705065 -1	1705065 -2	1705159 -1	1705159 -2
Client ID	Site #2 (CS334425)	Site #1 (CS334412)	Site #2 (CS339762)	Site #1	Site #2	Site #1	Site #2	Site #1	Site #2	Site #1	Site #2
Date Collected	11/9/2017	11/14/2017	11/14/2017	11/22/2017	11/22/2017	11/30/2017	11/30/2017	12/5/2017	12/5/2017	12/13/2017	12/13/2017
Fiber Concentration	<0.01	0.008	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

ARCO Recycling Lead Results

July 18, 2017- December 9, 2017

1705 Noble Road, East Cleveland

Cleveland ARCO Project Metals Data -

units -- μg/m³

Parameters

- designated

Month/ Date	Arsenic	Beryllium	Cadmium	Chromium	Lead	Manganese	Nickel	Zinc
July								
18-Jul-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.004	0.021	0.003	0.031
24-Jul-17	**0.0014**	**0.0001**	0.0004	0.003	0.029	0.059	0.004	0.063
30-Jul-17	**0.0014**	**0.0001**	0.0003	**0.001**	0.009	0.018	0.003	0.048
August								
5-Aug-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.004	**0.007**	**0.001**	0.031
11-Aug-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.010	0.019	**0.001**	0.048
17-Aug-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.019	0.036	0.011	0.070
23-Aug-17	**0.0014**	**0.0001**	0.0003	0.003	0.016	0.053	**0.001**	0.065
29-Aug-17	**0.0014**	**0.0001**	0.0005	0.004	0.031	0.076	0.005	0.082
September								
4-Sep-17	**0.0014**	**0.0001**	0.0006	**0.001**	0.010	0.033	**0.001**	0.061
10-Sep-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	**0.001**	**0.007**	**0.001**	**0.014**
16-Sep-17	0.0034	**0.0001**	0.0003	0.007	0.010	0.017	0.013	0.052
22-Sep-17	**0.0014**	**0.0001**	0.0004	0.004	0.030	0.067	0.004	0.077
28-Sep-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.016	0.029	**0.001**	**0.014**
October								
4-Oct-17	**0.0014**	**0.0001**	0.0004	0.003	0.019	0.058	0.004	0.072
10-Oct-17	**0.0013**	**0.0007**	0.0005	**0.007**	0.011	0.041	**0.007**	0.087
16-Oct-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.022	0.033	**0.001**	0.038
22-Oct-17	**0.0013**	**0.0001**	0.0007	**0.001**	0.012	0.025	**0.001**	0.056
28-Oct-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.012	0.024	**0.001**	0.039
November								
3-Nov-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.007	**0.006**	**0.001**	**0.014**
9-Nov-17	**0.0014**	**0.0001**	0.0004	**0.001**	0.029	0.056	0.003	0.084
15-Nov-17	**0.0014**	**0.0001**	0.0005	0.006	0.060	0.084	0.006	0.071
21-Nov-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.016	0.031	**0.001**	0.039
27-Nov-17	0.0036	0.0003	**0.0007**	**0.008**	0.143	0.216	**0.009**	0.187
3-Dec-17	**0.0014**	**0.0001**	**0.0005**	**0.003**	0.009	0.030	**0.007**	0.075
9-Dec-17	**0.0014**	**0.0001**	**0.0001**	**0.001**	0.016	0.036	**0.001**	0.057
Average	0.0015	0.0002	0.0003	0.0028	0.0217	0.043	0.0038	0.0589
Screening Value	0.002	0.004	0.01	0.3	0.15	0.3	0.2	6000
Source	IRIS(chr.)*	IRIS(chr.)*	MRLs(chr.)*	MRLs(intmed.)	NAAQS	MRLs(chr.)*	MRLs(intmed.)	PAC-1
Count	2	1	14	9	24	22	12	22

IRIS/MRLs (chronic)*- Intermediate screening values not available

Bold values=1/2 detection limit

MRLs=ATSDR Minimum Risk Level

IRIS= U.S. EPA Integrated Risk Information System

NAAQS= National Ambient Air Quality Standard

PAC-1=DOE Protective Action level

Count -Total detections out of 25 sampling events (other samples were below detection limits)

Concentration estimated due to interference with the internal standard.

ARCO PM10 Air Quality Summary

DATE	Day	24- hour concentration μg/m³	High 1-hour value μg/m³	High hour
December				
12/21/2017	Thursday	12	26.5	8
12/22/2017	Friday	14.6	24.3	5
12/23/2017	Saturday	5.5	10	22
12/24/2017	Sunday	7.9	16.1	14
12/25/2017	Monday	8.2	12.3	16
12/26/2017	Tuesday	13.8	20.1	13
12/27/2017	Wednesday	8.2	17.4	0

Note: NAAQS for PM10 - 150 μg/m³ - 24 hour average