Science Applications International Corporation
An Employee-Owned Company

April 6, 2005

Ms. Sharon Fisher
Harley-Davidson Motor Company Operations, Inc.
1425 Eden Road
York, PA 17402

Re: 2004 Summary of Operation for
North Building 4 Soil Vapor Extraction System
Harley-Davidson Motor Company Operations, Inc.
SAIC Project 01-1633-00-5385-800

Dear Sharon:

Science Applications International Corporation (SAIC) is providing this letter to summarize operation of the North Building 4 (NB4) soil vapor extraction (SVE) system during 2004. The NB4 SVE system is located at the York, Pennsylvania facility of Harley-Davidson Motor Company Operations, Inc. (Harley-Davidson). Through calendar year 2004, the system has been in operation for approximately 10 years (startup was in May 1994).

The purpose of the SVE system is to extract soil vapor containing volatile organic compounds (VOCs) from up to five multi-level vapor extraction wells (VEWs) located beneath the floor at the north end of Building 4. Each of the VEWs is piped and manifolded to a blower unit housed in a wooden shed located on the west side of Building 4 (refer to Figure 1). The blower unit applies a vacuum to the VEWs and transmits the extracted soil vapor via a 6-inch diameter schedule 80 poly-vinyl chloride (PVC) underground pipe to Building 41 for treatment. The soil vapor is passed through either a Thermal Fume Oxidizer (TFO) unit or a granular activated carbon (GAC) unit for destruction/absorption of the VOCs.

During 2004, the SVE system operated for all or portions of all but approximately 50 days. Several maintenance-related shutdowns of the groundwater treatment plant (GWTP) accounted for the periods of shut-down that occurred during 2004. A summary of the most noteworthy maintenance items is presented below:

- The SVE system was off for approximately seven days in March while SVE piping modifications were implemented. An integrity test performed on the SVE conveyance line indicated a potential leak proximal to a Tee connection located approximately 40' southwest of the SVE shed near Building 4 (see Figure 1). The Tee connection was excavated and a visual inspection of the removed Tee section indicated the presence of a small crack. The Tee was subsequently replaced. Additional changes included moving the SVE influent line upstream of the GAC unit for SVE off-gas treatment by either the TFO or GAC, the addition of a drip leg, and installation of a backflow prevention device.

- The SVE system was off for approximately six days in late April and May due to problems with the main programmable logic controller for the groundwater treatment system.

- The SVE system was down for approximately nine days in May while the packed tower aerator blower motor was repaired.
- The SVE system was off for approximately ten days in late June/early July while the packed tower aerator packing material was changed.

During 2004, SAIC performed monthly monitoring of the SVE system that included recording air flow data (refer to Table 1) and photoionization detector (PID) readings at up to seven vapor extraction points (refer to Figure 2). The seven locations that are sampled include EW-1 gravel, EW-1D, EW-2D, EW-3S, EW-4D, the gravel pit, and the total system influent (combined, prior to the blower). The remaining extraction points were shut off in early 2000 due to their very low VOC recoveries, and to enhance VOC recovery at the remaining locations.

SAIC typically collects soil vapor samples from active vacuum extraction wells on a quarterly basis. Four sampling events (January, May, June and October) were performed in 2004. The air samples were analyzed by VaporTech Services, Inc. of Valencia, Pennsylvania for five VOCs including:

- 1,1,1–Trichloroethane (TCA)
- Trichloroethene (TCE)
- Tetrachloroethene (PCE)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- Vinyl chloride

Table 2 summarizes the laboratory analytical results while Figures 3 through 6 graphically display the historical VOC data by sampling location. The total influent VOC concentrations measured during 2004 were generally lower compared with previous year historical trends. The historical range in VOC abundance (in the influent), followed by the 2004 percent by volume in the influent, is summarized for each parameter below:

- TCA: historically has ranged from 52 to 76 percent; averaging a low of 52 percent in 2004.
- TCE: has ranged from 17 to 30 percent; averaging 25 percent in 2004.
- PCE: has ranged from 5 to 21 percent; averaging a high of 21 percent in 2004.
- cis-1,2-DCE: has ranged from 0.1 to 2 percent; averaging 1 percent in 2004.
- Vinyl chloride: This parameter was added to the analytical suite in 2003 due to its recent occurrence in groundwater at collection well CW-15A (close to the NB4 SVE system). Vinyl chloride was not detected in the air samples in 2003 or 2004.

Based on a review of gas chromatography (GC) analysis and air flow data, SAIC estimates that approximately 55 pounds of VOCs were removed by the SVE system during 2004. This value is approximately equal to the quantity removed during calendar year 2003 (approximately 50 pounds); however, it should be noted that the SVE system was down for almost 8 months during 2003. One possible reason for the apparent decrease in VOC recovery is that residual VOC mass in site soils is

decreasing. A cumulative VOC recovery of approximately 34,947 pounds has been recorded since system start-up (refer to Figure 7 and Table 1).

If you have any questions or comments regarding this letter, please do not hesitate to contact either of the undersigned.

Very truly yours,

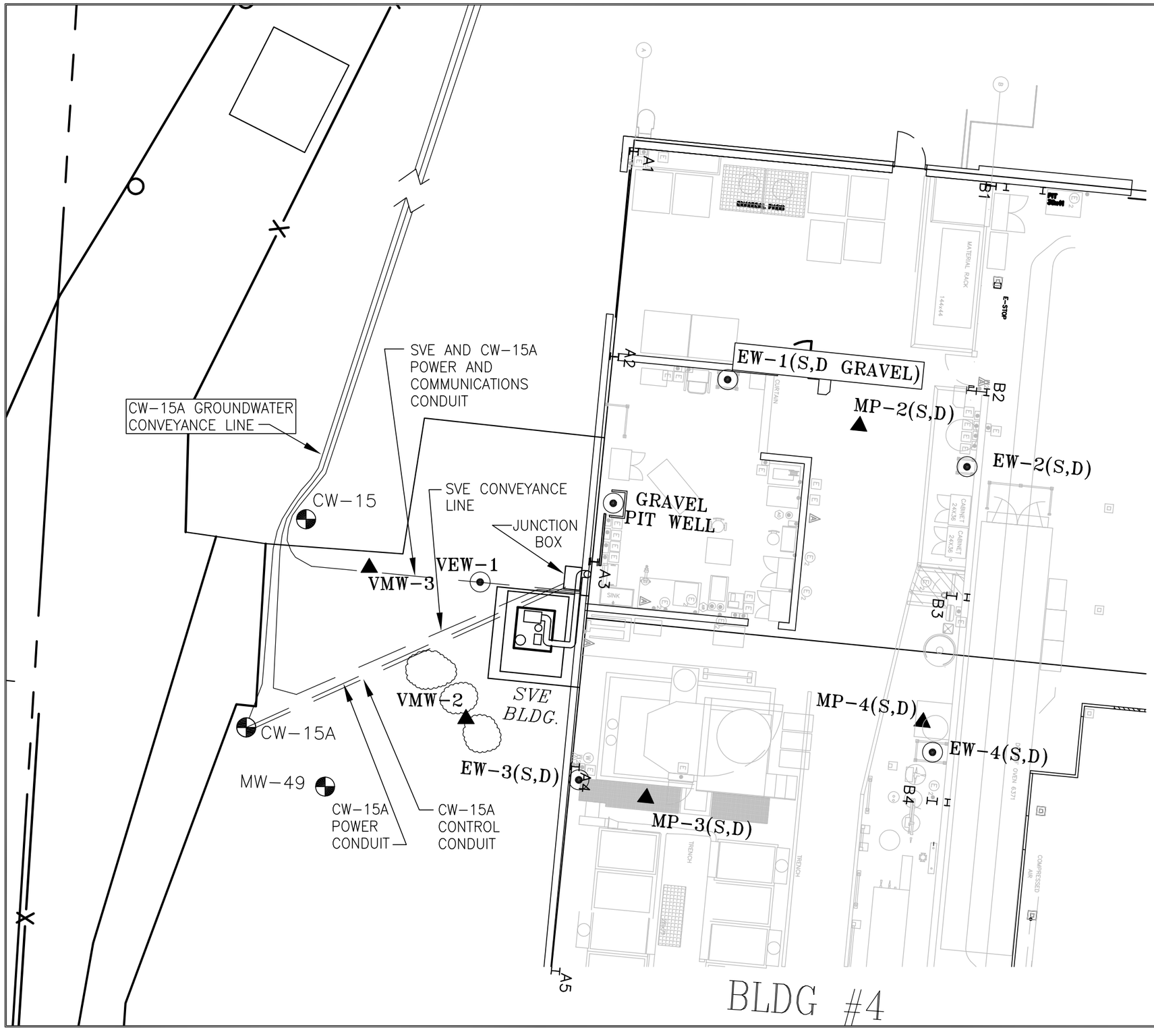
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

Scott L. McFeaters, P.G.
Project Scientist

Rodney G. Myers
Project Manager

cc: Ralph T. Golia – URS Corporation
Stephen Snyder – SAIC

FIGURES



LEGEND

EW–2(S,D)	SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
MP–2(S,D)	SOIL VAPOR EXTRACTION MONITORING POINT LOCATION AND DESIGNATION
CW–15	GROUNDWATER WELL LOCATION AND DESIGNATION

N

10' 0 10'

SCALE IN FEET

HARLEY–DAVIDSON MOTOR COMPANY OPERATIONS, INC.
YORK VEHICLE OPERATIONS
1425 EDEN ROAD,YORK, PA 17402

SOIL GAS EXTRACTION SYSTEM NORTH BUILDING 4 AREA

drawn RAM	checked SLM	approved RGM	figure no. 1
date 11/17/04	date 11/24/04	date 11/24/04	
job no. 01–1633–00–5389–067		file no. OM2004–011.dwg	

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FIGURE 2
2004 North Building 4 SVE PID Measurements
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

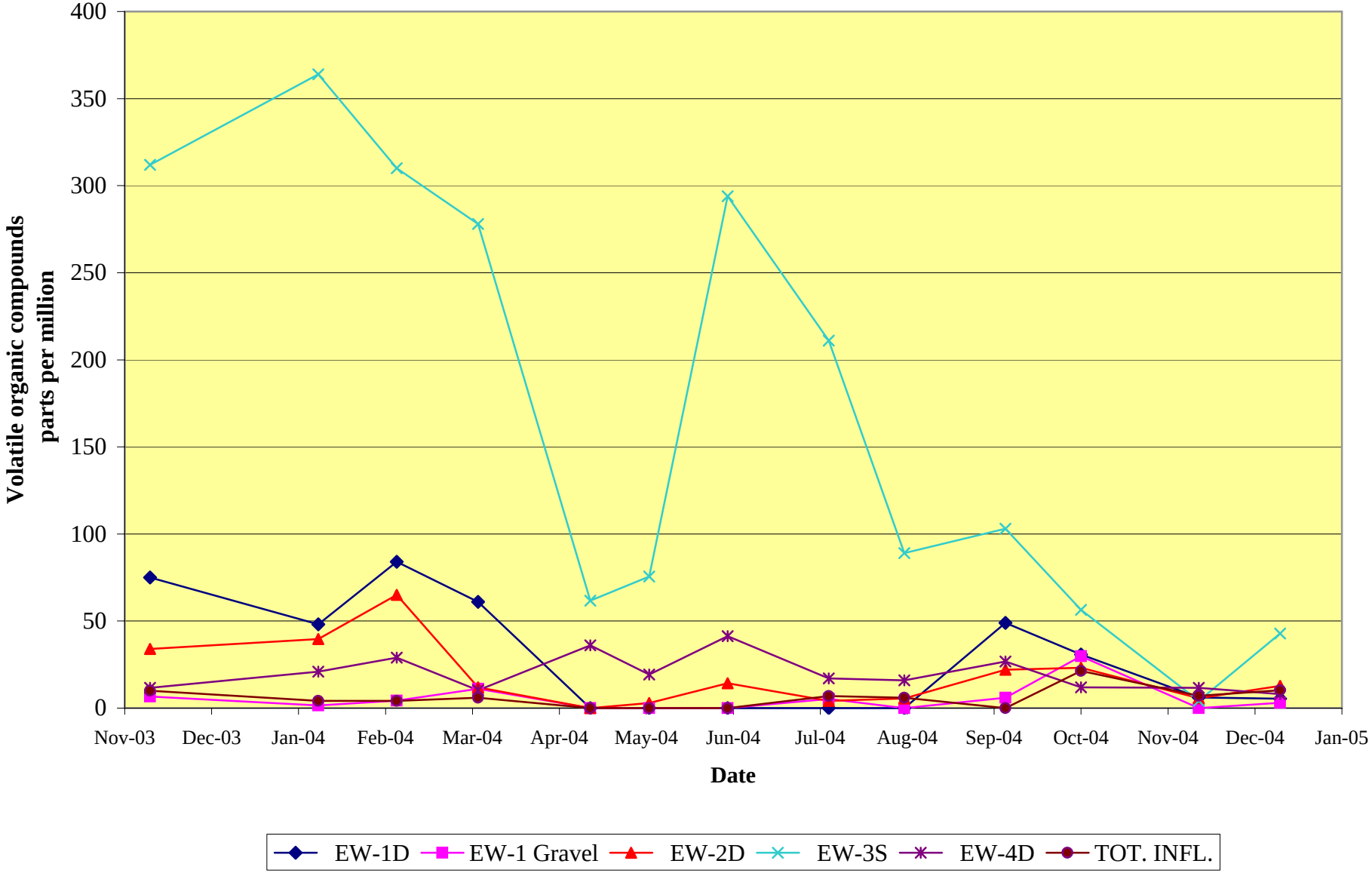


FIGURE 3
Historical 1,1,1-Trichloroethane (TCA) Concentrations
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

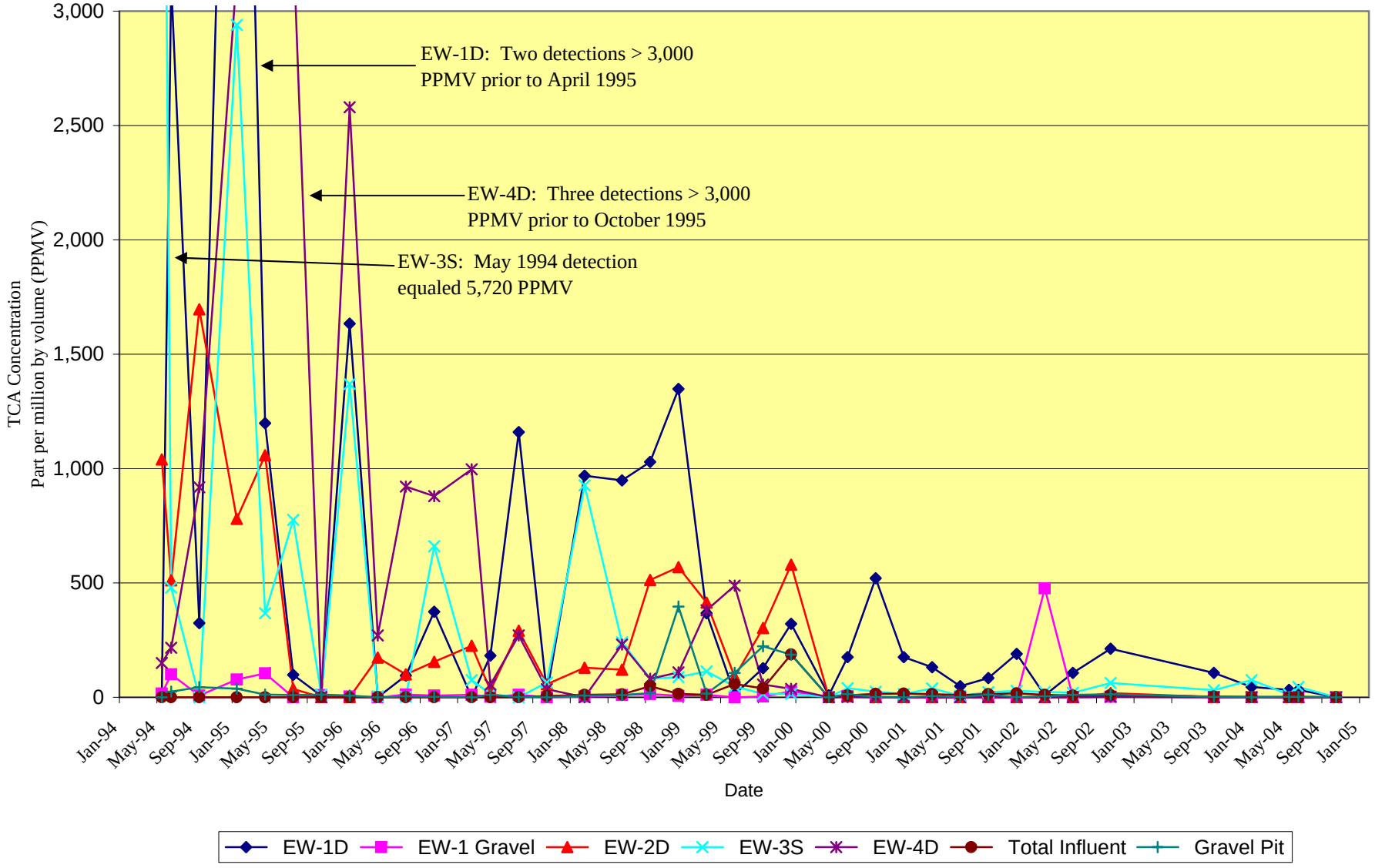


FIGURE 4
Historical Trichloroethylene (TCE) Concentrations
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

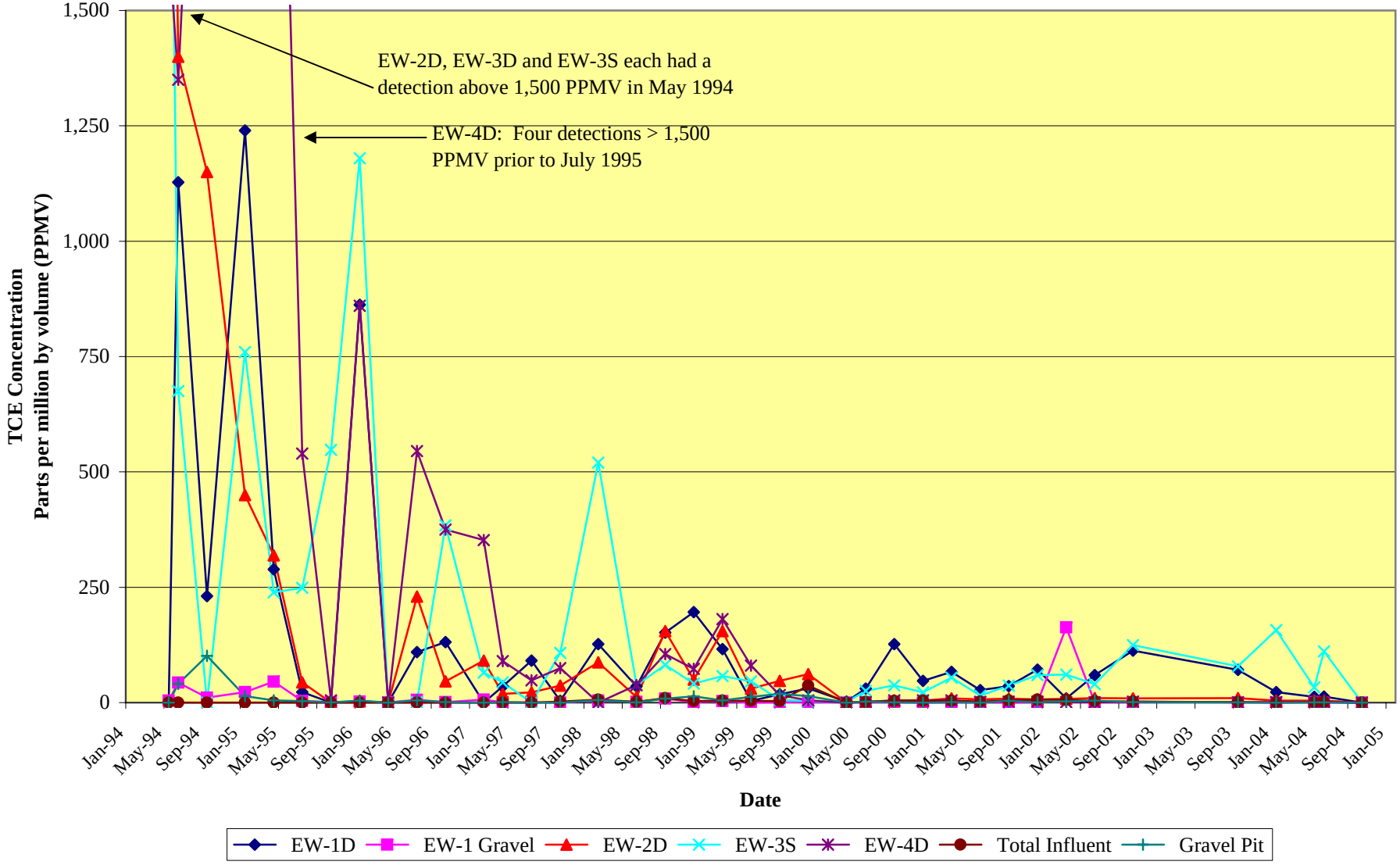


FIGURE 5
Historical Tetrachloroethylene (PCE) Concentrations
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

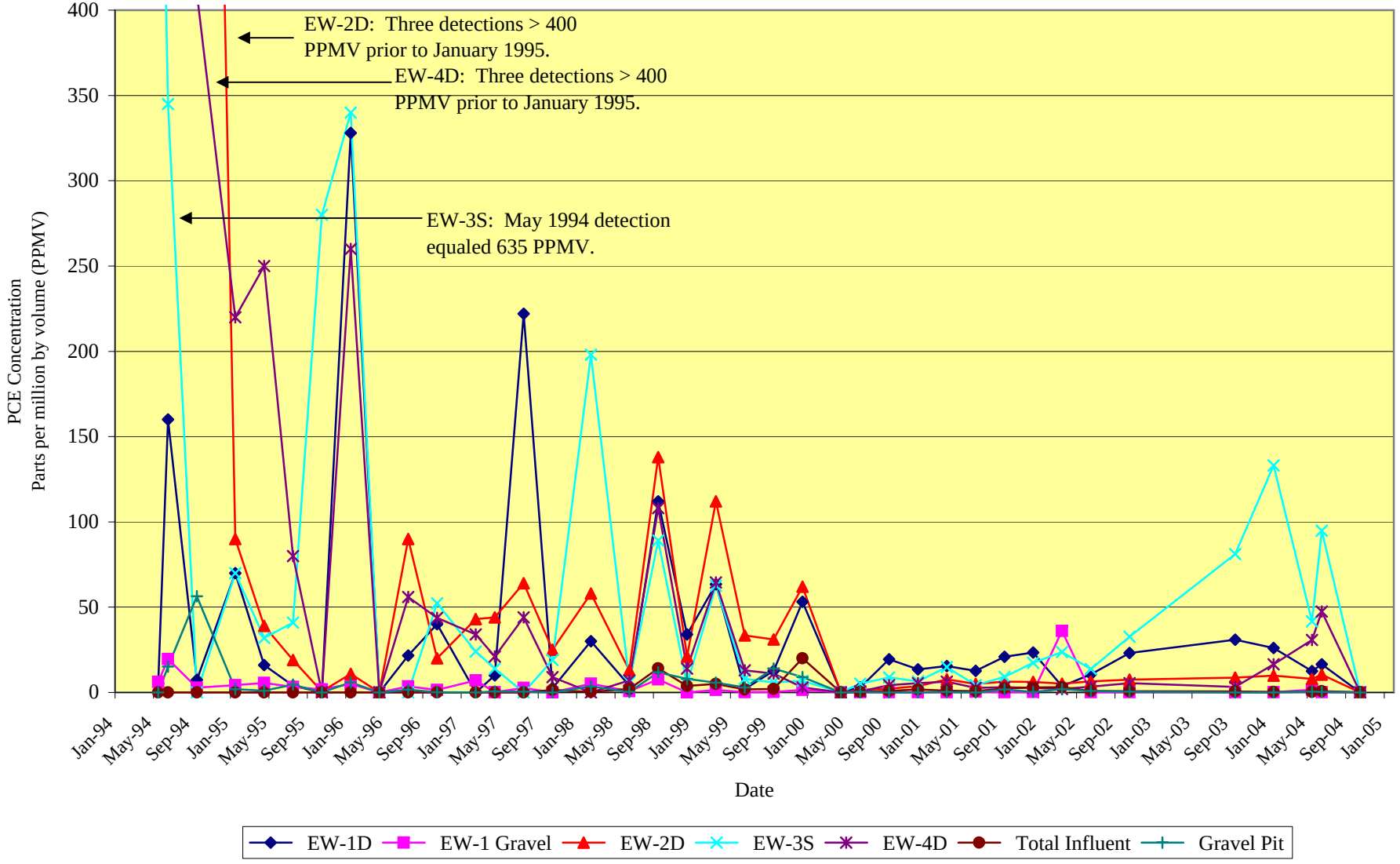


FIGURE 6
Historical cis-1,2-Dichloroethylene (DCE) Concentrations
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

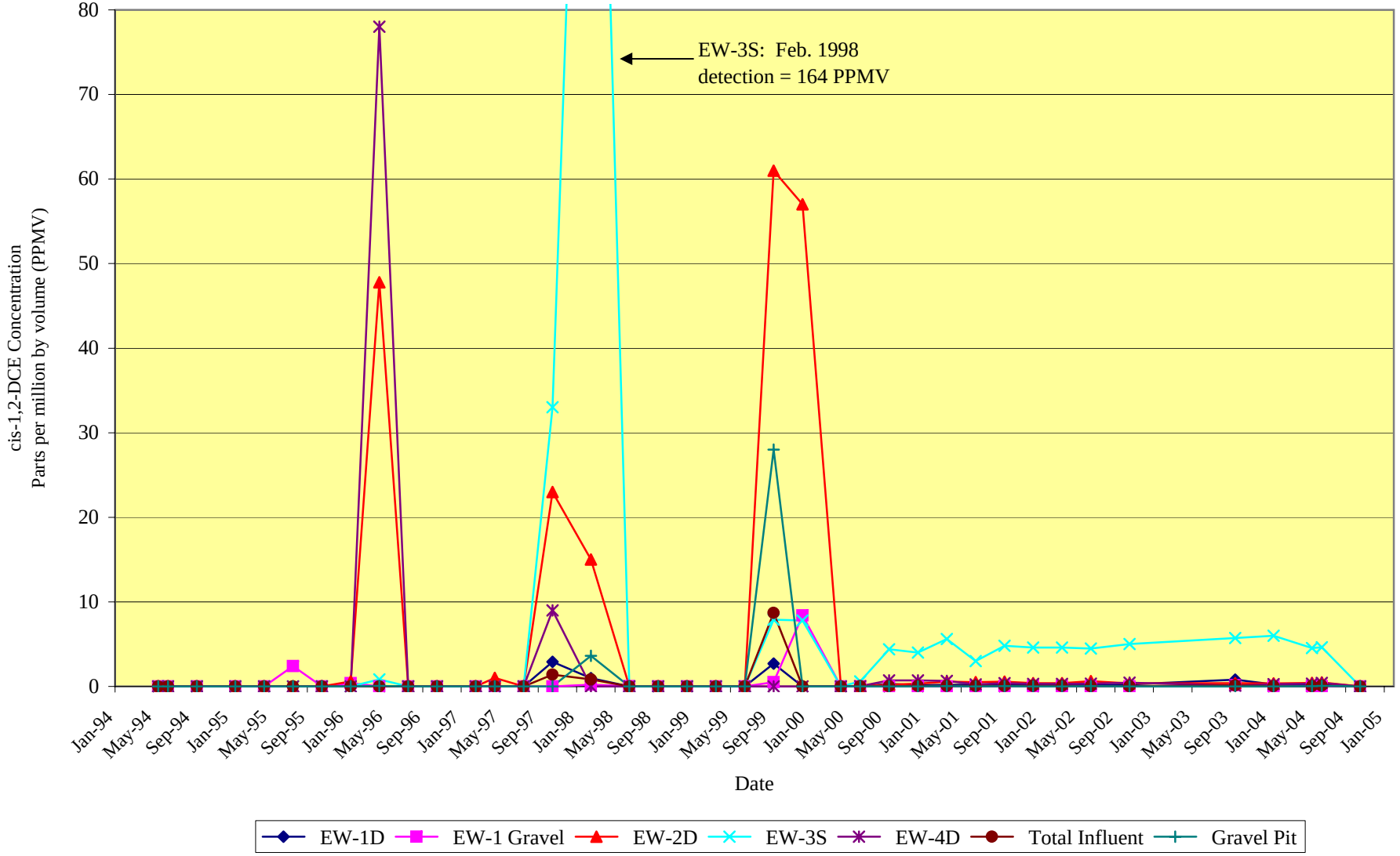
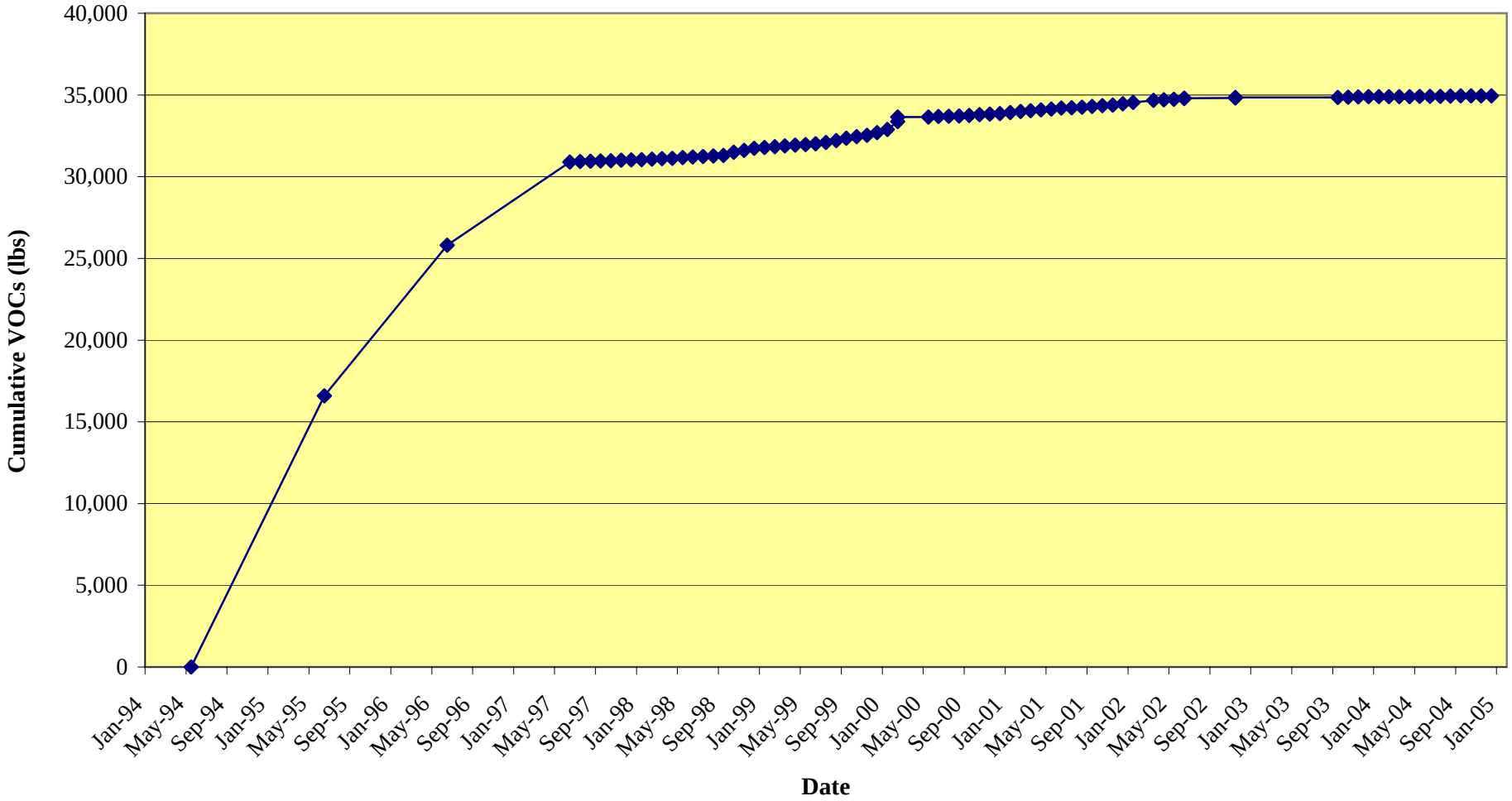


FIGURE 7
North Building 4 SVE Cumulative VOC Recovery
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402



Note: Monthly VOC recovery data was not recorded from start-up through June 1997.

TABLES

TABLE 1
NORTH BUILDING 4 SVE SYSTEM AIRFLOW RATES AND VOC RECOVERY

Harley-Davidson Motor Company Operations, Inc.

York Vehicle Operations

1425 Eden Road, York PA 17402

	TOTAL SYSTEM INFLUENT				
MEASUREMENT DATE	FLOW RATE (SCFM)	BLOWER VAC (IWC)	VOC RECOV (LBS)	CUMUL RECOV (LBS)	RATE (LBS/DAY)
Jun-95	--	--	16,596	16,596	--
Jun-96	--	--	9,205	25,801	--
6/5/97	126	44	5,099	30,900	--
7/24/97	129	42	31.5	30,931.5	0.64
8/21/97	129	42	18.4	30,949.9	0.66
9/4/97	126	44	9.2	30,959.1	0.66
10/9/97	133	40	22.5	30,981.5	0.64
11/6/97	122	46	19.0	31,000.5	0.68
12/4/97	124	45	17.4	31,017.9	0.62
1/21/98	133	40	30.3	31,048.2	0.63
2/18/98	133	40	19.0	31,067.2	0.68
3/17/98	135	38	31.8	31,099.0	1.18
4/7/98	158	23	25.1	31,124.0	1.19
5/5/98	156	24	39.1	31,163.2	1.40
6/2/98	133	40	38.6	31,201.8	1.38
7/3/98	133	40	35.0	31,236.8	1.13
8/4/98	129	42	36.1	31,273.0	1.13
9/1/98	133	40	30.7	31,303.6	1.10
10/9/98	120	48	190.1	31,493.7	5.00
11/3/98	122	46	112.8	31,606.5	4.51
12/1/98	126	44	128.5	31,735.0	4.59
1/5/99	133	40	50.9	31,785.9	1.45
2/5/99	150	30	47.6	31,833.5	1.53
3/2/99	133	40	43.3	31,876.8	1.73
4/6/99	127	43	48.3	31,925.1	1.38
5/4/99	129	42	36.9	31,962.0	1.32
6/8/99	99	58	46.9	32,008.9	1.34
7/6/99	133	40	87.7	32,096.5	3.13
8/3/99	126	44	117.8	32,214.3	4.21
9/7/99	133	40	139.5	32,353.8	3.99
10/4/99	122	46	91.2	32,445.0	3.38
11/2/99	124	45	89.9	32,534.9	3.10
12/22/99	127	43	157.5	32,692.5	3.15
1/3/00	124	45	189.5	32,881.9	15.79
2/4/00	104	56	493.3	33,375.2	15.42
2/25/00	system shut down		271.5	33,646.8	12.93
4/20/00	106	79	--	33,646.8	--
5/3/00	106	79	7.0	33,653.8	0.54
6/15/00	149	62	23.3	33,677.1	0.54
7/7/00	167	54	16.8	33,693.9	0.76
8/4/00	167	54	23.9	33,717.8	0.85
9/8/00	167	54	29.9	33,747.7	0.85
10/5/00	120	73	46.2	33,793.9	1.71
11/3/00	119	74	35.6	33,829.5	1.23
12/1/00	166	55	34.1	33,863.7	1.22

TABLE 1
NORTH BUILDING 4 SVE SYSTEM AIRFLOW RATES AND VOC RECOVERY

Harley-Davidson Motor Company Operations, Inc.

York Vehicle Operations

1425 Eden Road, York PA 17402

	TOTAL SYSTEM INFLUENT				
MEASUREMENT DATE	FLOW RATE (SCFM)	BLOWER VAC (IWC)	VOC RECOV (LBS)	CUMUL RECOV (LBS)	RATE (LBS/DAY)
1/5/01	166	55	66.3	33,930.0	1.90
2/2/01	167	54	53.1	33,983.1	1.90
3/2/01	167	54	53.4	34,036.5	1.91
4/6/01	167	54	55.8	34,092.3	1.60
5/3/01	174	52	43.1	34,135.4	1.60
6/8/01	164	56	59.8	34,195.2	1.66
7/5/01	167	54	28.2	34,223.4	1.04
8/3/01	167	54	30.8	34,254.2	1.06
9/20/01	166	55	51.0	34,305.2	1.06
10/12/01	164	56	40.5	34,345.7	1.84
11/2/01	166	55	38.2	34,383.9	1.82
12/14/01	167	54	77.4	34,461.3	1.84
1/18/02	164	56	80.1	34,541.3	2.29
3/20/02	161	58	132.6	34,673.9	2.25
4/5/02	167	54	26.5	34,700.4	1.65
5/3/02	164	56	27.5	34,727.8	1.72
6/7/02	164	56	59.0	34,786.8	1.68
6/23/02	system shut down		16.2	34,803.0	1.01
10/25/02	174	52	--[1]	34,803.0	--
11/1/02	167	54	15.9	34,818.8	1.13
11/23/02	system shut down		22.9	34,841.7	1.09
8/16/03	171	53	--[1]	34,841.7	--
9/5/03	164	56	9.6	34,851.3	0.48
10/3/03	171	53	11.3	34,862.6	0.46
11/10/03	178	50	16.1	34,878.8	0.48
12/10/03	system shut down		13.3	34,892.0	0.50
1/9/04	171	53	--[1]	34,892.0	--
2/6/04	167	54	3.6	34,895.6	0.13
3/6/04	180	49	3.7	34,899.3	0.13
4/15/04	174	52	3.7	34,903.0	0.14
5/6/04	171	53	3.1	34,906.1	0.18
6/3/04	167	54	4.9	34,911.0	0.38
7/9/04	176	51	8.9	34,919.9	0.37
8/5/04	174	52	10.6	34,930.5	0.39
9/10/04	174	52	12.0	34,942.5	0.39
10/7/04	171	53	1.3	34,943.8	0.05
11/18/04	164	56	2.1	34,945.9	0.05
12/17/04	193	43	0.9	34,946.8	0.05

--[1] Indicates a startup date, no VOC recovery is calculated until the next monitoring date
Note: Monthly VOC recovery data not recorded from start-up through June 1997.

TABLE 2
BUILDING 4 SOIL VAPOR MONITORING POINT VOC CONCENTRATIONS

Harley-Davidson Motor CompanyOperations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

SAMPLE LOCATIONS	*SAMPLE DATES*																		
	5/24/94	*6/22/94*	*9/7/94*	*1/18/95*	*4/26/95*	*7/27/95*	*10/26/95*	*1/4/96*	*4/26/96*	*7/15/96*	*10/10/96*	*2/7/97*	*4/11/97*	*7/24/97*	*10/9/97*	*2/18/98*	*6/2/98*	*9/1/98*	*12/1/98*
1,1,1- TCA																			
EW-1D	11.94	3127.5	324.3	6340	1198	98	6.4	1634	0.09	94.9	374.0	NA	182.0	1160	17	969	948	1029	1348
EW-1S	3.2	180.5	21.1	619	14.3	13.1	11.6	13.9	ND	16.0	16.2	17.2	7.8	45.4	1177	28.8	7.8	85.7	3
EW-1 Gravel	16.12	99.9	8.01	77.3	105	ND	9.5	2.7	0.36	12.3	7.7	10.3	2.0	10.7	NA	3.4	10.1	14.4	6
EW-2D	1040	512	1696	780	1058	37	0.3	0.3	173	100.0	155.0	225.0	30.0	291	57	129	121	513	569
EW-2S	110	73	54	199	161	ND	13.9	630	ND	ND	0.6	16.5	9.1	1.61	NA	2.6	0.3	11.9	9.5
EW-3D	360	ND	204.8	38	248	13	12.5	0.9	0.03	NS	0.5	11.8	0.7	1.39	0.2	ND	4.1	6	2.1
EW-3S	5720	480	NS	2940	367	776	11.4	1370	4.3	2.0	661.0	75.0	14.0	NA	65	927	240	81	88.5
EW-4D	150	217	918	3160	6140	3310	ND	2580	270	921.0	879.0	997.0	55.0	270	36	ND	231	81	109
EW-4S	40	ND	49.1	84	62.4	ND	9.5	10.8	4.9	14.3	13.5	57.0	5.9	12.8	9.4	1.2	0.7	20.6	3
Gravel Pit	NS	24.3	44.7	37.6	12.1	9.3	11.6	8	ND	4.8	2.4	NA	10.7	1.49	NA	7.09	10.1	18.6	397
Total Influent	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	5.2	10.3	12.7	48.3	15.4
TCE																			
EW-1D	4.05	1127.5	231.1	1240	289	23	ND	862	0.012	109.6	131.0	NA	35.0	91	3.9	127	35	152	196
EW-1S	15.25	113.2	10.8	137	6.9	4.3	2.5	9	0.44	9.0	4.3	8.1	1.0	1.8	157	13.2	0.7	39.2	3
EW-1 Gravel	4.32	43.5	10.8	22.5	45.3	4.0	1.2	2.2	0.8	6.1	1.0	6.3	0.3	0.4	NA	4.6	1.5	8.8	1
EW-2D	2860	1400	1150	450	319	44	ND	3.1	ND	230.0	46.2	91.0	19.0	22	37	87	12	155	50
EW-2S	685	380	90.8	92	58	ND	8.4	450	ND	0.01	0.23	36.7	4.7	0.24	NA	8.8	0.2	8.7	3
EW-3D	1900	735	154.3	57	239	5.4	8.5	3.5	ND	NS	0.8	7.8	7.6	1.1	0.3	4.9	2	15.6	1.8
EW-3S	2485	675	NS	760	239	249	548	1180	ND	1.0	384.0	65.0	44.0	NA	108	520	38	82	41
EW-4D	1645	1350	2635	1680	2825	540	4.8	860	ND	545.0	375.0	352.0	90.0	48	75	0.2	38	105	73
EW-4S	630	125	130.5	50	20.5	4.1	4	11.8	ND	92.0	4.1	22.0	0.9	0.7	4.2	4	0.1	13.5	1
Gravel Pit	NS	40.8	101.3	14.1	5.1	3.2	0.4	4.6	ND	4.8	0.9	NA	1.3	0.16	NA	5.3	0.7	8.7	13.5
Total Influent	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2.3	6.6	1.8	9.7	3
PCE																			
EW-1D	5.52	160	7.3	70	16	4	ND	328	NA	21.7	40.1	NA	10.0	222	2.5	30	4	112	34
EW-1S	2.55	84.1	12.5	15	2.1	5.7	ND	ND	NA	5.7	1.4	7.9	0.2	7.8	56	6.6	0.3	32.8	1
EW-1 Gravel	6.11	19.6	2.74	4.2	5.6	3.3	1.8	5	NA	3.5	1.5	7.0	0.1	2.6	NA	5.14	0.7	7.6	ND
EW-2D	1480	768	1230	90	39	19	0.6	10.9	NA	90.0	20.0	43.0	44.0	64	25	58	13	138	21
EW-2S	395	796	34.6	56	17.5	8.4	24.6	270	NA	ND	0.1	11.8	8.9	1.7	NA	10.6	0.8	14.7	4.8
EW-3D	1040	525	79.4	18	41	7.1	ND	3.3	NA	NS	0.2	8.5	7.8	3.05	0.2	0.94	1.9	18	1.9
EW-3S	635	345	NS	70	32	41	280	340	NA	ND	52.2	24.0	14.0	NA	19	198	6	89	5
EW-4D	1290	765	410	220	250	80	ND	260	NA	56.0	43.7	34.0	21.0	44	9	0.02	7	108	14
EW-4S	470	275	127	18	12.2	5.3	ND	23.5	NA	42.0	3.8	9.0	0.2	4.1	3.2	4.2	0.3	23.3	ND
Gravel Pit	NS	15.1	56.4	1.9	1.1	4.6	0.05	5.9	NA	1.7	0.2	NA	0.6	0.37	NA	3.5	0.3	11.8	8
Total Influent	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.4	0.28	2	14.1	3.8
c-1,2- DCE																			
EW-1D	ND	ND	ND	ND	ND	ND	0.03	ND	0.03	ND	ND	NA	ND	ND	2.9	0.99	ND	ND	ND
EW-1S	ND	ND	ND	ND	ND	ND	0.01	ND	0.08	ND	ND	ND	ND	ND	173	2.4	0.01	ND	ND
EW-1 Gravel	ND	ND	ND	ND	ND	2.4	ND	0.4	0.008	ND	ND	ND	ND	ND	NA	0.2	0.03	ND	ND
EW-2D	ND	ND	ND	ND	ND	ND	ND	0.6	47.8	ND	ND	ND	1.0	ND	23	15	ND	ND	ND
EW-2S	ND	ND	ND	ND	ND	3.4	ND	ND	0.06	ND	ND	ND	ND	ND	NA	0.2	ND	ND	ND
EW-3D	ND	ND	ND	ND	ND	ND	ND	0.2	0.04	NS	ND	ND	ND	ND	0.04	0.11	0.02	ND	ND
EW-3S	ND	ND	NS	ND	ND	ND	ND	ND	0.82	ND	ND	ND	ND	NA	33	164	ND	ND	ND
EW-4D	ND	ND	ND	ND	ND	ND	ND	ND	78	ND	ND	ND	ND	ND	9	ND	ND	ND	ND
EW-4S	ND	ND	ND	ND	ND	3.0	ND	ND	0.09	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND
Gravel Pit	NS	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	NA	ND	ND	NA	3.61	ND	ND	ND
Total Influent	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.4	0.82	ND	ND	ND
Vinyl-chloride																			
EW-1D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1 Gravel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-2D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-2S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-4D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-4S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Gravel Pit	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Influent	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

ND - Not Detected
NS - Not Sampled
NA - Not Analyzed
All concentrations are in Part per million by volume (PPMV)

TABLE 2
BUILDING 4 SOIL VAPOR MONITORING POINT VOC CONCENTRATIONS

Harley-Davidson Motor CompanyOperations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

SAMPLE LOCATIONS	*SAMPLE DATES*																			
	3/2/99	*6/8/99*	*9/7/99*	*12/22/99*	*4/20/00*	*6/16/00*	*9/8/00*	*12/1/00*	*3/2/01*	*6/8/01*	*9/20/01*	*12/14/01*	*3/20/02*	*6/7/02*	*10/25/02*	*9/5/03*	*1/9/04*	*5/6/04*	*6/3/04*	*10/7/04*
1,1,1- TCA																				
EW-1D	367	12.6	127	321	8.5	176	521	176	132	48	83.7	190	8.7	106	212	106.553	45.129	32.102	31.968	ND
EW-1S	13.3	0.9	6.6	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1 Gravel	10.5	0.2	3.2	25.4	0.01	4.8	1.8	0.78	0.43	0.21	0.52	0.68	477	0.7	2	0.722	0.142	1.237	0.303	ND
EW-2D	414	89.3	303	580	ND	4.8	0.03	0.03	0.06	0.03	0.07	0.05	0.19	0.04	18.6	1.313	2.052	0.342	0.243	ND
EW-2S	10.6	0.4	3.2	4.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3D	3.4	0.3	2.4	136	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3S	113	47	15.6	15.3	0.96	39.8	25.3	14	38.5	6.3	23	27.5	23.4	19.6	62.4	31.186	75.259	11.415	44.99	ND
EW-4D	380	488	56	36.6	0.03	0.8	0.12	0.16	0.11	0.05	0.04	0.07	0.02	0.06	2.4	0.321	0.344	0.368	0.426	ND
EW-4S	9	7.4	22.5	126	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Gravel Pit	15.8	107	223	186	0.01	14.2	1.4	NS	5.2	0.85	11.4	1.5	4	10.3	13.2	2.204	0.027	2.093	2.233	ND
Total Influent	10.5	57.7	39.2	188	0.01	8.1	15.5	16.1	13.9	9.7	14.3	17.4	10.8	7.9	9.8	3.628	0.701	1.125	2.57	0.238
TCE																				
EW-1D	116	4	17.7	31.1	2.4	30.1	127	47.4	66.6	27.1	35.7	71.3	9.1	59.9	113	70.993	22.916	12.58	12.804	ND
EW-1S	5.3	0.3	0.8	1.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1 Gravel	3.4	0.1	0.7	1.5	ND	0.6	0.42	0.23	0.21	0.3	0.24	0.34	163	0.39	0.57	0.387	0.123	0.856	0.17	ND
EW-2D	155	30.4	47	62	ND	2	4.5	4.5	9.2	6.8	8.5	7.2	8.4	9.6	9.4	9.551	4.103	4.305	4.163	ND
EW-2S	5.1	0.2	1.1	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3D	4.1	0.4	0.4	15.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3S	57.4	46	6.2	3.1	0.85	25.3	37.6	22.1	54.3	15.2	36.9	59.5	60.5	40.2	124	78.385	157.038	33.271	110.99	0.009
EW-4D	181	80	16	5	0.04	1.2	4.9	4.7	5.1	1.7	2.1	2.2	1.2	0.8	2.9	0.404	0.962	1.329	1.865	ND
EW-4S	3.7	0.8	4.2	17.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Gravel Pit	4.9	12.4	19	14	ND	2.3	0.28	NS	1.3	0.2	3.7	0.47	2.8	4.1	1.2	0.478	0.036	0.652	0.46	ND
Total Influent	4.1	3.6	3	37	ND	1.8	3.9	4.6	3.9	2.2	5	6.4	6	3.5	2.3	1.195	0.385	0.459	0.868	0.177
PCE																				
EW-1D	63.4	2	12.7	53.2	0.33	2.9	19.4	13.6	15.5	12.7	20.9	23.4	3.6	10.6	23.1	30.887	26.058	12.489	16.478	ND
EW-1S	5.9	0.1	0.4	1.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1 Gravel	1.5	0.1	0.3	1.4	ND	0.1	0.1	0.11	0.1	0.41	0.2	0.28	36.1	0.1	0.17	0.193	0.146	1.578	0.194	ND
EW-2D	112	33.4	31	62	ND	1.5	2.2	3.7	7.6	5	6.3	6.2	5.2	6.5	7.6	8.651	9.868	7.998	10.44	ND
EW-2S	7.9	0.3	1.6	1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3D	4.6	0.2	0.3	8.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3S	62.6	8	5.9	6.7	0.19	5.2	8.8	6.5	14.9	4.3	9.2	17.4	23.7	13.7	32.7	81.128	133.142	41.652	94.75	0.022
EW-4D	64.5	13	11	3	0.01	0.6	4.3	5.5	6.3	2.7	3.1	2.6	2	3.5	5.4	3.302	16.552	30.782	47.359	0.032
EW-4S	4.3	0.7	1.8	24.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Gravel Pit	5.7	3	14	9	ND	0.3	0.04	NS	0.33	0.07	1.7	0.23	1.9	0.92	0.51	0.131	0.068	0.399	0.251	ND
Total Influent	5	1.7	2	20	ND	0.3	0.95	1.8	1.1		2.4	3	3.1	0.83	0.78	0.605	0.331	0.356	0.786	0.14
c-1,2- DCE																				
EW-1D	ND	ND	2.7	ND	ND	0.03	0.3	0.15	0.18	0.22	0.25	0.26	0.02	0.13	0.23	0.8	0.23	0.15	0.16	ND
EW-1S	ND	ND	0.4	3.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1 Gravel	ND	ND	0.5	8.4	ND	0.01	ND	ND	ND	0.01	0.02	0.02	0.21	ND	ND	0.14	0.03	0.02	0.02	ND
EW-2D	ND	ND	61	57	ND	0.03	0.22	0.33	0.57	0.51	0.57	0.39	0.35	0.62	0.37	0.39	0.36	0.42	0.47	ND
EW-2S	ND	ND	0.6	1.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3D	ND	ND	ND	38.3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3S	ND	ND	7.9	7.8	0.01	0.6	4.4	4	5.6	3	4.8	4.6	4.2	4.5	5	5.72	5.99	4.55	4.62	ND
EW-4D	ND	ND	ND	ND	ND	0.04	0.72	0.7	0.64	0.25	0.38	0.29	0.11	0.34	0.44	0.09	0.27	0.33	0.41	ND
EW-4S	0.13	ND	1.3	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Gravel Pit	ND	ND	28	ND	ND	0.01	ND	NS	0.02	ND	0.04	ND	0.04	0.02	ND	ND	ND	0.02	0.05	ND
Total Influent	ND	ND	8.7	ND	ND	0.02	0.03	0.05	0.07	0.05	0.07	0.07	0.04	0.04	0.03	0.12	0.03	0.03	0.08	ND
Vinyl-chloride																				
EW-1D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND
EW-1S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-1 Gravel	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND
EW-2D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND
EW-2S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
EW-3S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND
EW-4D	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND
EW-4S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Gravel Pit	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND
Total Influent	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND

ND - Not Detected
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All concentrations are in Part per million by volume (PPMV)