



Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates ($\mu\text{g}/\text{m}^3$)							Naphthalene ($\mu\text{g}/\text{m}^3$)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/1/13 12:00 AM	291.00	2.40	4.80	2.00	0.00	0.40	2.00	0.90	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:15 AM	279.00	1.80	6.30	1.50	0.00	0.30	1.50	0.10	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:30 AM	276.00	2.20	8.20	1.80	0.00	0.80	1.80	0.00	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:45 AM	294.00	2.20	9.10	1.80	0.00	1.00	1.80	0.20	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:00 AM	307.00	1.90	7.70	2.10	0.00	1.50	2.10	1.70	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:15 AM	304.00	2.40	4.40	2.10	0.00	0.10	2.10	2.30	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:30 AM	306.00	2.90	6.30	2.50	0.00	0.30	2.50	1.70	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:45 AM	290.00	2.50	10.00	2.50	0.00	0.70	2.50	1.60	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:00 AM	295.00	2.30	9.70	2.30	0.00	1.00	2.30	1.90	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:15 AM	282.00	3.30	11.70	3.00	0.00	1.50	3.00	2.50	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:30 AM	292.00	2.50	13.80	3.00	0.00	2.10	3.00	4.50	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:45 AM	300.00	2.60	13.90	3.50	0.00	2.70	3.50	5.90	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:00 AM	280.00	1.60	14.00	3.60	0.00	2.80	3.60	5.50	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:15 AM	274.00	2.10	14.50	4.20	0.00	3.30	4.20	7.60	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:30 AM	269.00	2.10	7.70	3.40	0.00	3.40	6.90	7.70	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:45 AM	282.00	2.10	15.50	8.70	0.00	3.80	8.70	9.00	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:00 AM	280.00	2.30	19.60	9.90	0.00	5.30	9.90	9.50	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:15 AM	254.00	1.40	9.50	4.30	0.00	4.30	9.20	9.50	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:30 AM	230.00	1.10	7.90	4.10	0.00	4.10	8.50	7.90	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:45 AM	232.00	1.60	7.20	3.60	0.00	3.60	8.30	7.20	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:00 AM	249.00	1.80	8.10	4.00	0.00	4.00	8.20	8.10	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:15 AM	266.00	1.90	8.30	4.10	0.00	4.10	7.70	8.30	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:30 AM	248.00	1.60	7.10	4.40	0.00	4.40	7.80	7.10	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:45 AM	255.00	1.70	7.30	3.60	0.00	3.60	7.20	7.30	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 6:00 AM	256.00	2.10	6.70	3.50	0.00	3.50	7.80	6.70	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 6:15 AM	251.00	1.60	5.30	3.40	0.00	3.40	7.70	5.30	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 6:30 AM	261.00	2.20	4.50	3.40	0.00	3.40	7.40	4.50	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 6:45 AM	265.00	2.20	4.20	3.00	0.00	3.00	6.10	4.20	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 7:00 AM	255.00	3.30	4.20	2.70	0.00	2.70	6.10	4.20	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 7:15 AM	263.00	2.50	4.70	3.10	0.00	3.10	7.80	4.70	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 7:30 AM	266.00	3.40	5.30	3.70	0.00	3.70	6.40	5.30	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 7:45 AM	262.00	2.90	5.60	3.30	0.00	3.30	6.60	5.60	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 8:00 AM	298.00	3.00	11.30	7.60	0.00	3.10	7.60	7.30	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 8:15 AM	300.00	3.10	9.10	7.60	0.00	3.70	7.60	7.40	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 8:30 AM	344.00	3.00	9.60	6.70	0.00	3.80	6.70	4.50	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 8:45 AM	307.00	4.80	10.20	6.50	0.00	3.60	6.50	4.80	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 9:00 AM	297.00	3.40	11.00	6.80	0.00	3.90	6.80	4.80	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 9:15 AM	316.00	4.10	12.30	7.90	0.00	3.80	7.90	5.90	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 9:30 AM	280.00	3.80	16.20	8.60	0.00	5.30	8.60	7.60	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 9:45 AM	323.00	3.90	18.90	9.70	0.00	6.20	9.70	9.50	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 10:00 AM	285.00	1.70	20.30	10.20	0.00	6.50	10.20	16.00	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 10:15 AM	288.00	1.40	20.30	10.90	0.00	6.80	10.90	18.30	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 10:30 AM	318.00	5.80	22.10	10.20	0.00	5.70	10.20	10.90	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 10:45 AM	10.00	2.40	4.60	6.70	2.10	4.60	11.10	6.70	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 11:00 AM	287.00	2.60	13.50	10.80	0.00	3.50	10.80	5.70	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 11:15 AM	306.00	4.90	23.60	10.90	0.00	1.50	10.90	8.30	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 11:30 AM	313.00	3.00	17.10	7.90	0.00	1.90	7.90	-2.90	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 11:45 AM	337.00	3.80	16.70	6.90	0.00	-1.50	6.90	0.00	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:00 PM	348.00	3.80	7.30	6.20	0.00	0.40	6.20	-2.40	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:15 PM	347.00	4.10	13.40	6.30	0.00	1.40	6.30	0.70	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:30 PM	329.00	2.20	13.40	8.20	0.00	7.10	8.20	18.50	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 12:45 PM	12.00	6.30	0.70	2.40	1.70	0.70	5.00	2.40	26.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:00 PM	39.00	3.50	0.50	0.80	0.30	0.50	6.30	0.80	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:15 PM	28.00	5.40	-0.90	-1.80	0.00	-0.90	5.10	-1.80	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:30 PM	32.00	5.10	1.90	0.00	0.00	1.90	8.00	0.00	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 1:45 PM	44.00	6.50	0.70	2.80	2.10	0.70	7.90	2.80	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:00 PM	39.00	5.80	0.50	3.50	3.00	0.50	12.10	3.50	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:15 PM	52.00	6.80	22.90	5.90	0.00	22.90	9.10	5.90	44.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:30 PM	37.00	5.90	4.50	11.60	7.10	4.50	16.40	11.60	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 2:45 PM	56.00	5.50	3.50	4.80	1.30	3.50	7.90	4.80	24.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:00 PM	45.00	5.70	1.90	2.50	0.60	1.90	35.60	2.50	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:15 PM	55.00	5.80	3.30	3.20	0.00	3.30	13.90	3.20	27.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:30 PM	37.00	5.90	0.00	3.20	3.20	0.00	12.50	3.20	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 3:45 PM	21.00	6.30	2.80	6.20	3.40	2.80	7.30	6.20	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:00 PM	30.00	6.80	1.70	1.60	0.00	1.70	8.00	1.60	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:15 PM	46.00	5.20	0.90	2.00	1.10	0.90	8.10	2.00	22.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:30 PM	49.00	6.50	0.00	-0.60	0.00	0.00	7.10	-0.60	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 4:45 PM	34.00	4.30	0.20	-2.20	0.00	0.20	5.90	-2.20	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:00 PM	71.00	4.20	-0.70	2.20	2.90	-0.70	8.30	2.20	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:15 PM	80.00	3.70	-1.30	1.00	2.30	-1.30	10.10	1.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/1/13 5:30 PM	37.00	3.00	0.00	0.00	0.00	0.00	10.60	0.00								



**US Army Corps
of Engineers**

**Indiana Harbor and Canal
Confined Disposal Facility**
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/2/13 12:45 AM	206.00	2.60	18.50	16.00	0.00	16.00	22.70	18.50	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:00 AM	212.00	2.00	22.10	21.70	0.00	21.70	23.20	22.10	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:15 AM	189.00	2.10	24.20	40.60	16.40	40.60	25.00	24.20	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:30 AM	209.00	2.30	25.80	25.30	0.00	25.30	24.40	25.80	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:45 AM	207.00	2.10	27.30	28.30	1.00	28.30	23.30	27.30	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:00 AM	211.00	2.60	33.60	35.40	1.80	35.40	26.60	33.60	30.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:15 AM	229.00	2.40	50.10	54.40	4.30	54.40	29.80	50.10	54.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:30 AM	206.00	2.60	37.00	22.50	0.00	22.50	21.20	37.00	42.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:45 AM	224.00	3.30	18.50	15.20	0.00	15.20	18.30	18.50	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:00 AM	252.00	5.20	10.20	12.70	2.50	12.70	15.20	10.20	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:15 AM	205.00	3.60	7.10	11.30	4.20	11.30	13.90	7.10	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:30 AM	211.00	3.10	5.90	2.90	0.00	2.90	10.10	5.90	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:45 AM	196.00	1.90	2.90	0.80	0.00	0.80	17.50	2.90	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:00 AM	359.00	7.00	7.40	11.30	3.90	1.40	11.30	6.50	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:15 AM	161.00	2.00	7.40	12.80	5.40	2.70	7.40	5.30	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:30 AM	154.00	1.30	8.00	6.60	0.00	0.70	8.00	2.70	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:45 AM	168.00	1.60	8.80	12.30	3.50	2.70	8.80	3.90	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:00 AM	204.00	1.50	3.90	1.00	0.00	1.00	7.50	3.90	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:15 AM	187.00	2.40	4.10	1.40	0.00	1.40	8.90	4.10	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:30 AM	201.00	1.50	4.30	1.50	0.00	1.50	8.40	4.30	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:45 AM	164.00	1.30	12.90	6.30	0.00	2.90	12.90	3.50	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 6:00 AM	152.00	1.60	11.70	7.00	0.00	4.00	11.70	3.20	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 6:15 AM	183.00	2.50	4.30	4.00	0.00	4.00	15.40	4.30	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 6:30 AM	165.00	2.60	10.40	6.70	0.00	0.00	10.40	2.50	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 6:45 AM	156.00	4.30	11.30	3.90	0.00	-1.50	11.30	-2.60	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 7:00 AM	184.00	5.10	-1.10	0.70	1.80	0.70	7.10	-1.10	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 7:15 AM	193.00	3.50	-1.10	-1.40	0.00	-1.40	13.20	-1.10	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 7:30 AM	196.00	3.40	3.00	0.60	0.00	0.60	10.90	3.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 7:45 AM	210.00	4.00	1.30	4.20	2.90	4.20	12.30	1.30	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 8:00 AM	347.00	3.40	6.60	10.30	3.70	3.60	10.30	2.50	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 8:15 AM	215.00	2.70	2.90	5.40	2.50	5.40	11.80	2.90	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 8:30 AM	195.00	3.20	3.50	-1.30	0.00	-1.30	7.60	3.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 8:45 AM	248.00	2.20	5.90	-0.40	0.00	-0.40	9.60	5.90	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 9:00 AM	184.00	3.90	4.90	0.10	0.00	0.10	9.60	4.90	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 9:15 AM	178.00	2.70	9.40	9.20	0.00	1.60	9.40	7.60	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 9:30 AM	218.00	3.10	8.20	11.10	2.90	11.10	11.90	8.20	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 9:45 AM	206.00	2.00	9.70	5.20	0.00	5.20	10.10	9.70	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 10:00 AM	203.00	2.70	10.70	5.40	0.00	5.40	13.50	10.70	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 10:15 AM	207.00	2.50	7.60	4.30	0.00	4.30	10.80	7.60	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 10:30 AM	197.00	5.30	9.30	6.30	0.00	6.30	12.20	9.30	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 10:45 AM	205.00	3.20	9.10	8.50	0.00	8.50	11.70	9.10	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 11:00 AM	238.00	6.40	8.30	8.60	0.30	8.60	10.50	8.30	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 11:15 AM	240.00	5.00	8.50	9.70	1.20	9.70	11.40	8.50	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 11:30 AM	219.00	5.50	9.00	10.30	1.30	10.30	12.30	9.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 11:45 AM	229.00	4.20	9.20	11.70	2.50	11.70	14.80	9.20	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 12:00 PM	208.00	4.10	12.00	15.00	3.00	15.00	17.90	12.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 12:15 PM	209.00	4.10	13.30	17.50	4.20	17.50	19.80	13.30	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 12:30 PM	228.00	2.90	14.60	17.50	2.90	17.50	21.90	14.60	11.10	0.00	2.30	2.30	0.00	2.30	0.00	0.00
8/2/13 12:45 PM	235.00	5.40	15.60	20.10	4.50	20.10	21.60	15.60	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:00 PM	259.00	7.20	17.20	19.80	2.60	19.80	21.90	17.20	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:15 PM	251.00	4.90	18.60	20.70	2.10	20.70	20.70	18.60	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:30 PM	260.00	5.00	16.40	19.80	3.40	19.80	20.20	16.40	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 1:45 PM	274.00	5.30	13.40	18.10	4.70	19.60	18.10	13.40	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:00 PM	273.00	4.00	14.70	18.60	3.90	19.60	18.60	14.70	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:15 PM	261.00	4.80	16.40	19.10	2.70	19.10	19.40	16.40	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:30 PM	256.00	5.80	16.70	19.10	2.40	19.10	17.90	16.70	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 2:45 PM	244.00	6.70	15.60	17.90	1.30	17.90	17.00	15.60	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:00 PM	278.00	4.40	18.70	18.00	0.00	21.40	18.00	17.60	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:15 PM	276.00	7.40	20.10	21.40	1.30	20.40	21.40	19.00	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:30 PM	258.00	5.80	16.70	13.70	0.00	13.70	18.00	16.70	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 3:45 PM	322.00	3.10	13.40	11.40	0.00	12.60	11.40	9.90	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:00 PM	266.00	11.10	10.70	12.50	1.80	12.50	13.10	10.70	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:15 PM	243.00	1.90	11.90	10.20	0.00	10.20	12.40	11.90	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:30 PM	277.00	4.10	15.80	14.70	0.00	12.90	14.70	11.80	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 4:45 PM	272.00	2.50	21.60	16.00	0.00	16.40	16.00	16.40	21.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:00 PM	310.00	1.50	21.50	23.90	2.40	21.40	23.90	20.80	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:15 PM	17.00	5.70	-6.00	0.40	6.40	-6.00	3.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:30 PM	9.00	4.20	18.00	2.70	0.00	18.00	10.40	2.70	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 5:45 PM	20.00	2.20	2.40	2.70	0.30	2.40	7.80	2.70	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/2/13 6:00 PM	9.00	4.70	5.50	5.00	0.00	5.50	7.00	5.00	4.60	0.00	0.00	0.00	0.00			



Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m³)						Naphthalene (µg/m³)								
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	
8/3/13 1:30 AM	38.00	5.70	31.30	29.70	0.00	31.30	23.60	29.70	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 1:45 AM	38.00	4.00	23.60	22.30	0.00	23.60	13.90	22.30	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:00 AM	18.00	2.90	12.50	7.00	0.00	12.50	6.30	7.00	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:15 AM	0.00	3.90	10.90	4.70	0.00	10.90	6.20	4.70	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:30 AM	4.00	2.70	6.30	4.20	0.00	6.30	4.70	4.20	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:45 AM	9.00	3.70	5.20	3.60	0.00	5.20	4.20	3.60	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:00 AM	11.00	3.20	8.40	3.10	0.00	8.40	4.60	3.10	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:15 AM	0.00	3.00	0.00	3.40	0.00	0.00	5.00	3.40	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:30 AM	2.00	4.40	5.70	2.70	0.00	5.70	4.10	2.70	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:45 AM	9.00	3.40	5.20	2.50	0.00	5.20	4.00	2.50	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:00 AM	353.00	3.60	2.40	4.10	1.70	5.20	4.10	2.60	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:15 AM	9.00	4.00	4.30	2.60	0.00	4.30	3.90	2.60	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:30 AM	2.00	5.60	4.80	2.90	0.00	4.80	4.20	2.90	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:45 AM	6.00	5.00	4.60	2.90	0.00	4.60	4.40	2.90	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:00 AM	0.00	7.00	4.30	2.50	0.00	4.30	4.10	2.50	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:15 AM	15.00	6.30	3.30	2.20	0.00	3.30	3.50	2.20	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:30 AM	10.00	7.40	2.90	1.40	0.00	2.90	3.50	1.40	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:45 AM	19.00	7.80	3.60	1.30	0.00	3.60	3.90	1.30	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 6:00 AM	13.00	7.10	3.40	1.40	0.00	3.40	3.80	1.40	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 6:15 AM	14.00	6.10	3.10	1.50	0.00	3.10	4.00	1.50	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 6:30 AM	18.00	6.10	2.90	1.20	0.00	2.90	3.50	1.20	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 6:45 AM	14.00	5.80	3.70	1.20	0.00	3.70	3.50	1.20	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 7:00 AM	29.00	5.10	3.50	1.70	0.00	3.50	4.30	1.70	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 7:15 AM	31.00	6.40	3.30	1.60	0.00	3.30	4.40	1.60	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 7:30 AM	34.00	7.30	4.20	2.00	0.00	4.20	5.50	2.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 7:45 AM	34.00	8.40	5.70	2.30	0.00	5.70	6.20	2.30	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 8:00 AM	45.00	6.70	12.60	3.30	0.00	12.60	10.30	3.30	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 8:15 AM	16.00	6.30	8.40	5.30	0.00	8.40	9.20	5.30	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 8:30 AM	44.00	4.80	11.90	7.00	0.00	11.90	11.40	7.00	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 8:45 AM	50.00	4.80	13.60	14.70	1.10	13.60	13.20	14.70	8.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 9:00 AM	42.00	5.10	13.70	15.50	1.80	13.70	17.10	15.50	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 9:15 AM	15.00	6.10	15.30	19.80	4.50	15.30	16.40	19.80	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 9:30 AM	52.00	5.70	14.50	15.30	0.80	14.50	16.10	15.30	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 9:45 AM	49.00	7.60	15.00	15.70	0.70	15.00	15.90	15.70	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 10:00 AM	24.00	6.70	13.50	18.40	4.90	13.50	14.30	18.40	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 10:15 AM	31.00	6.70	13.50	16.00	2.50	13.50	17.50	16.00	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 10:30 AM	27.00	5.80	13.00	14.80	1.80	13.00	13.70	14.80	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 10:45 AM	35.00	7.60	10.20	9.10	0.00	10.20	11.10	9.10	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 11:00 AM	43.00	7.70	11.40	11.10	0.00	11.40	11.90	11.10	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 11:15 AM	30.00	8.40	7.00	10.30	3.30	7.00	8.60	10.30	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 11:30 AM	31.00	6.40	3.60	5.80	2.20	3.60	4.10	5.80	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 11:45 AM	30.00	7.00	2.90	2.80	0.00	2.90	2.80	2.80	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 12:00 PM	35.00	5.60	1.90	3.20	1.30	1.90	1.50	3.20	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 12:15 PM	28.00	7.00	2.30	-0.70	0.00	2.30	2.10	-0.70	-0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 12:30 PM	23.00	8.30	0.00	-0.10	0.00	0.00	1.60	-0.10	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 12:45 PM	34.00	7.70	0.00	-0.20	0.00	0.00	1.30	-0.20	-1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 1:00 PM	46.00	6.70	1.10	0.00	0.00	1.10	1.50	0.00	-0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 1:15 PM	33.00	6.20	0.40	-0.40	0.00	0.40	1.70	-0.40	-0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 1:30 PM	55.00	7.40	0.50	-0.40	0.00	0.50	1.50	-0.40	-0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 1:45 PM	48.00	6.50	-1.50	-1.60	0.00	-1.50	1.50	-1.60	-0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:00 PM	19.00	7.20	-0.80	0.40	1.20	-0.80	1.10	0.40	-0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:15 PM	39.00	6.90	1.40	-0.80	0.00	1.40	1.50	-0.80	-0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:30 PM	48.00	6.70	2.90	-0.60	0.00	2.90	1.20	-0.60	1.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 2:45 PM	24.00	7.10	-1.70	-1.40	0.30	-1.70	0.70	-1.40	-1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:00 PM	26.00	8.30	-0.30	0.00	0.30	-0.30	0.70	0.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:15 PM	56.00	3.60	-1.80	4.20	6.00	-1.80	0.00	4.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:30 PM	71.00	4.80	-1.10	-0.30	0.80	-1.10	2.10	-0.30	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 3:45 PM	69.00	8.40	0.00	0.00	0.00	0.00	1.90	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:00 PM	35.00	6.20	-0.20	1.10	1.30	-0.20	1.70	1.10	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:15 PM	80.00	7.00	0.80	1.60	0.80	0.80	2.40	1.60	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:30 PM	79.00	5.30	2.30	3.30	1.00	2.30	4.00	3.30	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 4:45 PM	66.00	4.80	2.10	6.60	4.50	2.10	3.30	6.60	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:00 PM	91.00	2.80	4.60	4.50	0.00	1.10	4.60	4.50	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:15 PM	93.00	4.90	9.20	-1.40	0.00	6.60	9.20	12.70	-1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:30 PM	104.00	3.90	10.10	9.10	0.00	4.80	10.10	10.90	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 5:45 PM	53.00	5.70	6.90	8.20	1.30	6.90	15.00	8.20	-0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 6:00 PM	77.00	4.20	7.50	7.30	0.00	7.50	25.00	7.30	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/3/13 6:15 PM	91.00	3.10	13.80	0.70	0.00	10.80	13.80	20.80	0.70	0.00							



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates ($\mu\text{g}/\text{m}^3$)							Naphthalene ($\mu\text{g}/\text{m}^3$)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	
8/4/13 2:15 AM	114.00	0.90	24.30	18.40	0.00	14.80	24.30	12.00	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 2:30 AM	239.00	1.30	15.00	11.70	0.00	11.70	26.80	15.00	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 2:45 AM	177.00	1.00	18.00	14.00	0.00	11.40	18.00	13.70	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:00 AM	189.00	1.00	12.80	11.20	0.00	11.20	18.50	12.80	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:15 AM	225.00	1.00	7.50	9.70	2.20	9.70	17.30	7.50	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:30 AM	270.00	1.70	14.80	16.00	1.20	11.70	16.00	12.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:45 AM	249.00	1.20	11.60	15.30	3.70	15.30	13.40	11.60	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:00 AM	263.00	1.20	11.40	15.20	3.80	15.20	14.50	11.40	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:15 AM	252.00	1.00	11.30	18.90	7.60	18.90	16.10	11.30	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:30 AM	249.00	1.00	11.30	17.00	5.70	17.00	19.30	11.30	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:45 AM	216.00	0.60	12.00	18.30	6.30	18.30	26.30	12.00	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:00 AM	256.00	1.20	11.50	18.90	7.40	18.90	25.40	11.50	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:15 AM	249.00	1.20	12.50	21.10	8.60	21.10	25.10	12.50	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:30 AM	243.00	1.10	11.30	21.10	9.80	21.10	36.30	11.30	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:45 AM	260.00	2.00	12.20	20.60	8.40	20.60	24.40	12.20	23.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:00 AM	291.00	1.20	31.20	24.20	0.00	21.20	24.20	12.80	31.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:15 AM	210.00	0.80	14.00	24.00	10.00	24.00	27.00	14.00	31.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:30 AM	271.00	1.70	28.00	28.20	0.20	22.80	28.20	16.00	28.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:45 AM	318.00	1.00	25.30	27.00	1.70	21.30	27.00	16.70	25.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 7:00 AM	239.00	0.30	16.20	18.40	2.20	18.40	25.30	16.20	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 7:15 AM	221.00	0.40	14.90	19.90	5.00	19.90	27.10	14.90	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 7:30 AM	228.00	0.20	22.10	22.80	0.70	20.70	22.80	14.70	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 7:45 AM	25.00	2.30	20.30	14.40	0.00	20.30	21.40	14.40	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 8:00 AM	57.00	1.70	20.10	17.50	0.00	20.10	23.20	17.50	20.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 8:15 AM	35.00	4.60	23.00	12.00	0.00	23.00	23.90	12.00	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 8:30 AM	37.00	2.80	17.80	8.20	0.00	17.80	23.10	8.20	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 8:45 AM	41.00	5.10	16.30	5.80	0.00	16.30	18.20	5.80	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 9:00 AM	39.00	4.50	5.30	4.40	0.00	5.30	10.50	4.40	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 9:15 AM	36.00	3.90	0.00	2.30	0.00	0.00	5.60	2.30	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 9:30 AM	67.00	6.70	3.60	2.90	0.00	3.60	5.90	2.90	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 9:45 AM	91.00	4.20	6.10	7.40	1.30	3.40	6.10	10.60	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 10:00 AM	77.00	4.50	4.40	6.40	2.00	4.40	5.20	6.40	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 10:15 AM	79.00	5.00	3.90	5.60	1.70	3.90	6.50	5.60	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 10:30 AM	62.00	4.80	12.40	10.40	0.00	12.40	10.90	10.40	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 10:45 AM	0.00	0.00	0.00	0.00	0.00	12.10	9.20	0.80	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 11:00 AM	85.00	4.20	13.80	40.60	26.80	13.80	9.20	40.60	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 11:15 AM	75.00	4.90	8.20	90.30	82.10	8.20	9.10	90.30	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 11:30 AM	58.00	5.30	21.70	22.90	1.20	21.70	10.60	22.90	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 11:45 AM	45.00	7.90	23.80	77.60	53.80	23.80	12.70	77.60	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 12:00 PM	25.00	6.30	11.50	162.00	150.50	11.50	7.40	162.00	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 12:15 PM	36.00	7.30	14.10	223.10	209.00	14.10	10.50	223.10	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 12:30 PM	58.00	5.40	11.30	105.90	94.60	11.30	18.00	105.90	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 12:45 PM	69.00	5.60	2.40	2.00	0.00	2.40	20.10	2.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 1:00 PM	24.00	8.10	0.40	0.90	0.50	0.40	14.50	0.90	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 1:15 PM	37.00	9.00	0.60	10.80	10.20	0.60	13.60	10.80	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 1:30 PM	65.00	7.30	4.80	9.80	5.00	4.80	8.00	9.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 1:45 PM	32.00	4.80	2.00	92.70	90.70	2.00	5.60	92.70	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 2:00 PM	77.00	5.70	5.60	2.70	0.00	5.60	6.50	2.70	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 2:15 PM	70.00	5.30	1.10	26.70	25.60	1.10	3.90	26.70	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 2:30 PM	38.00	6.70	2.00	0.70	0.00	2.00	3.90	0.70	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 2:45 PM	34.00	6.00	1.20	0.80	0.00	1.20	5.20	0.80	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:00 PM	37.00	5.80	1.50	0.50	0.00	1.50	8.60	0.50	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:15 PM	31.00	7.80	1.30	5.00	3.70	1.30	6.20	5.00	8.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:30 PM	37.00	8.60	0.20	1.50	1.30	0.20	7.30	1.50	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 3:45 PM	14.00	5.60	2.30	4.80	2.50	2.30	10.20	4.80	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:00 PM	22.00	6.90	4.70	23.70	19.00	4.70	11.10	23.70	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:15 PM	36.00	7.10	7.40	15.90	8.50	7.40	16.90	15.90	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:30 PM	30.00	6.00	0.90	19.20	18.30	0.90	10.10	19.20	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 4:45 PM	26.00	5.90	6.40	4.50	0.00	6.40	4.70	4.50	59.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:00 PM	26.00	5.60	2.30	68.30	66.00	2.30	5.40	68.30	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:15 PM	46.00	7.10	2.60	8.00	5.40	2.60	5.50	8.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:30 PM	28.00	5.90	4.30	17.60	13.30	4.30	5.40	17.60	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 5:45 PM	52.00	5.30	4.00	12.70	8.70	4.00	8.50	12.70	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:00 PM	79.00	3.50	5.70	151.60	145.90	5.70	6.80	151.60	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:15 PM	72.00	3.40	6.90	15.60	8.70	6.90	6.40	15.60	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:30 PM	96.00	4.30	6.40	4.00	0.00	6.40	210.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/4/13 6:45 PM	72.00	4.50	-0.50														



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Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates ($\mu\text{g}/\text{m}^3$)								Naphthalene ($\mu\text{g}/\text{m}^3$)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/5/13 3:00 AM	135.00	2.20	15.30	31.50	16.20	18.80	15.30	15.20	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:15 AM	147.00	2.20	13.60	18.90	5.30	15.20	13.60	16.40	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:30 AM	153.00	1.50	10.10	22.10	12.00	16.20	10.10	17.60	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:45 AM	172.00	1.80	14.60	20.40	5.80	19.70	14.60	28.20	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:00 AM	177.00	2.50	7.30	27.70	20.40	20.90	7.30	29.50	27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:15 AM	156.00	2.30	5.90	21.70	15.80	9.70	5.90	15.00	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:30 AM	165.00	2.10	6.70	6.00	0.00	2.30	6.70	12.10	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:45 AM	181.00	2.40	19.80	3.00	0.00	3.00	8.00	19.80	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:00 AM	174.00	2.60	8.70	6.50	0.00	2.80	8.70	4.70	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:15 AM	157.00	2.70	9.10	5.00	0.00	2.30	9.10	6.80	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:30 AM	175.00	2.10	14.10	6.20	0.00	4.00	14.10	5.40	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:45 AM	189.00	1.30	6.50	5.10	0.00	5.10	9.60	6.50	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:00 AM	164.00	1.70	16.80	12.00	0.00	5.50	16.80	8.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:15 AM	184.00	1.80	8.00	7.70	0.00	7.70	7.40	8.00	13.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:30 AM	159.00	3.60	4.80	9.70	5.00	9.20	4.80	6.90	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:45 AM	182.00	3.60	19.40	13.30	0.00	13.30	11.40	19.40	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:00 AM	184.00	2.80	14.60	19.20	4.60	19.20	20.60	14.60	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:15 AM	194.00	3.20	11.20	18.00	6.80	18.00	13.90	11.20	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:30 AM	177.00	3.30	9.20	14.50	5.30	15.10	9.20	6.90	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:45 AM	171.00	3.00	7.60	7.60	0.00	16.70	7.60	7.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:00 AM	169.00	4.00	21.40	6.30	0.00	5.20	21.40	16.70	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:15 AM	187.00	3.80	19.90	5.00	0.00	5.00	5.80	19.90	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:30 AM	190.00	2.20	15.90	10.20	0.00	10.20	8.10	15.90	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:45 AM	201.00	3.00	22.20	5.80	0.00	5.80	10.70	22.20	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 9:00 AM	190.00	2.40	5.60	7.60	2.00	7.60	7.50	5.60	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 9:15 AM	190.00	2.20	6.80	7.90	1.10	7.90	9.20	6.80	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 9:30 AM	195.00	3.20	6.60	9.20	2.60	9.20	10.10	6.60	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 9:45 AM	207.00	4.40	8.20	6.30	0.00	6.30	23.10	8.20	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 10:00 AM	191.00	2.80	121.10	7.20	0.00	7.20	8.30	121.10	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 10:15 AM	201.00	2.90	7.30	8.00	0.70	8.00	8.60	7.30	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 10:30 AM	186.00	3.40	8.30	7.30	0.00	7.30	7.80	8.30	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 10:45 AM	201.00	3.10	9.50	7.80	0.00	7.80	9.30	9.50	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 11:00 AM	214.00	3.40	8.10	7.50	0.00	7.50	11.70	8.10	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 11:15 AM	210.00	4.10	8.00	7.00	0.00	7.00	10.00	8.00	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 11:30 AM	218.00	4.30	7.20	22.10	14.90	22.10	7.70	7.20	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 11:45 AM	209.00	3.30	6.90	5.40	0.00	5.40	8.20	6.90	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 12:00 PM	204.00	4.70	7.50	5.50	0.00	5.50	9.30	7.50	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 12:15 PM	212.00	5.00	7.30	6.90	0.00	6.90	7.60	7.30	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 12:30 PM	254.00	4.40	7.80	6.70	0.00	6.70	8.60	7.80	6.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 12:45 PM	182.00	2.80	8.20	8.50	0.30	8.50	10.00	8.20	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 1:00 PM	175.00	2.70	11.80	10.70	0.00	10.90	11.80	10.80	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 1:15 PM	186.00	3.00	9.50	9.50	0.00	9.50	10.00	9.50	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 1:30 PM	193.00	6.60	8.30	9.20	0.90	9.20	9.50	8.30	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 1:45 PM	219.00	6.00	24.80	11.00	0.00	11.00	12.20	24.80	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 2:00 PM	219.00	4.00	9.40	10.20	0.80	10.20	11.90	9.40	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 2:15 PM	205.00	5.30	9.60	11.10	1.50	11.10	10.10	9.60	8.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 2:30 PM	226.00	4.60	8.30	9.20	0.90	9.20	10.60	8.30	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 2:45 PM	219.00	3.50	6.40	7.60	1.20	7.60	7.70	6.40	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:00 PM	227.00	6.70	6.00	5.70	0.00	5.70	6.30	6.00	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:15 PM	233.00	3.60	6.80	8.10	1.30	8.10	17.60	6.80	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:30 PM	219.00	6.00	6.50	7.00	0.50	7.00	7.80	6.50	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 3:45 PM	215.00	3.60	47.20	7.50	0.00	7.50	6.60	47.20	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:00 PM	220.00	6.10	8.00	4.80	0.00	4.80	8.10	8.00	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:15 PM	230.00	6.30	13.90	8.60	0.00	8.60	25.50	13.90	24.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:30 PM	220.00	4.60	8.70	7.20	0.00	7.20	11.70	8.70	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 4:45 PM	235.00	4.90	9.70	8.30	0.00	8.30	10.30	9.70	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:00 PM	194.00	3.60	14.90	8.70	0.00	8.70	9.70	14.90	56.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:15 PM	198.00	3.40	9.30	8.20	0.00	8.20	9.10	9.30	8.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:30 PM	201.00	3.30	8.80	8.30	0.00	8.30	9.30	8.80	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 5:45 PM	213.00	4.70	10.90	9.30	0.00	9.30	9.30	10.90	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:00 PM	196.00	3.20	7.60	3.10	0.00	3.10	6.00	7.60	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:15 PM	185.00	6.80	7.70	6.40	0.00	6.40	8.00	7.70	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:30 PM	156.00	2.10	7.20	7.60	0.40	5.70	7.20	8.30	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 6:45 PM	151.00	4.70	7.10	5.90	0.00	6.00	7.10	6.00	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:00 PM	189.00	4.40	6.30	7.10	0.80	7.10	9.10	6.30	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:15 PM	194.00	3.10	6.70	9.20	2.50	9.20	11.30	6.70	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:30 PM	173.00	3.30	7.70	5.80	0.00	7.50	7.70	6.10	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 7:45 PM	169.00	2.50	8.40	5.50	0.00	10.40	8.40	5.90	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:00 PM	181.00	3.50	7.00	8.90	1.90	8.90	18.70	7.00	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:15 PM	181.00	4.00	5.70	13.80	8.10	13.80	10.50	5.70	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/5/13 8:30 PM	198.00	3.50	5.70															



US Army Corps of Engineers

Indiana Harbor and Canal Confinement Disposal Facility Real-Time Air Monitoring Data 8-1-13 to 8-31-13

Table with columns: Reading Time (EST), Wind Direction, Wind Speed, and two main sections: Particulates (ug/m^3) and Naphthalene (ug/m^3). Each section includes sub-columns for Upwind, Downwind, and CDF Contribution, followed by specific parameters (M1-M4).



US Army Corps of Engineers

Indiana Harbor and Canal
 Confined Disposal Facility
 Real-Time Air Monitoring Data
 8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m³)								Naphthalene (µg/m³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/7/13 4:30 AM	212.00	3.00	24.00	27.60	3.60	27.60	29.40	24.00	22.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 4:45 AM	219.00	3.60	25.20	28.00	2.80	28.00	30.10	25.20	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:00 AM	198.00	2.60	25.90	28.70	2.80	28.70	30.40	25.90	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:15 AM	209.00	4.00	26.50	29.70	3.20	29.70	30.30	26.50	24.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:30 AM	243.00	3.50	25.80	27.40	1.60	27.40	29.00	25.80	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:45 AM	212.00	2.80	25.20	26.50	1.30	26.50	29.00	25.20	23.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:00 AM	204.00	3.10	25.20	26.30	1.10	26.30	27.20	25.20	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:15 AM	209.00	3.90	25.30	27.50	2.20	27.50	27.10	25.30	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:30 AM	241.00	3.40	25.80	27.50	1.70	27.50	26.90	25.80	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:45 AM	221.00	2.60	23.50	25.10	1.60	25.10	25.10	23.50	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:00 AM	245.00	3.30	20.90	22.20	1.30	22.20	21.30	20.90	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:15 AM	238.00	3.60	18.20	19.40	1.20	19.40	16.70	18.20	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:30 AM	251.00	3.60	16.70	17.10	0.40	17.10	14.20	16.70	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:45 AM	236.00	3.70	14.30	14.30	0.00	14.30	12.60	14.30	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:00 AM	261.00	3.40	13.50	12.60	0.00	12.60	10.30	13.50	9.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:15 AM	234.00	3.80	12.70	12.60	0.00	12.60	9.70	12.70	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:30 AM	224.00	3.00	13.30	12.80	0.00	12.80	9.50	13.30	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:45 AM	246.00	4.00	12.70	11.90	0.00	11.90	9.50	12.70	9.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 9:00 AM	253.00	3.00	12.80	12.00	0.00	12.00	11.90	12.80	8.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 9:15 AM	254.00	3.30	13.00	11.90	0.00	11.90	9.60	13.00	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 9:30 AM	267.00	3.90	12.60	11.60	0.00	11.60	8.70	12.60	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 9:45 AM	230.00	2.90	12.10	11.00	0.00	11.00	8.30	12.10	9.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 10:00 AM	256.00	3.30	11.20	10.70	0.00	10.70	7.20	11.20	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 10:15 AM	194.00	4.50	11.80	10.40	0.00	10.40	7.60	11.80	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 10:30 AM	238.00	3.40	11.00	9.40	0.00	9.40	6.30	11.00	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 10:45 AM	241.00	5.70	11.40	10.80	0.00	10.80	7.20	11.40	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 11:00 AM	228.00	3.80	11.40	10.90	0.00	10.90	7.50	11.40	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 11:15 AM	251.00	4.40	23.00	10.40	0.00	10.40	9.30	23.00	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 11:30 AM	235.00	5.30	15.50	12.80	0.00	12.80	10.80	15.50	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 11:45 AM	236.00	4.00	13.00	11.20	0.00	11.20	10.50	13.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 12:00 PM	216.00	5.70	16.50	11.50	0.00	11.50	8.70	16.50	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 12:15 PM	210.00	6.40	14.40	13.70	0.00	13.70	11.00	14.40	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 12:30 PM	233.00	5.80	55.10	15.10	0.00	15.10	29.70	55.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 12:45 PM	214.00	5.10	16.00	0.00	0.00	0.00	13.10	16.00	63.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 1:00 PM	222.00	5.70	18.70	17.30	0.00	17.30	14.80	18.70	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 1:15 PM	275.00	6.00	13.10	12.80	0.00	12.80	12.80	13.10	13.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 1:30 PM	246.00	3.70	16.00	13.50	0.00	13.50	14.60	16.00	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 1:45 PM	276.00	4.40	16.40	15.00	0.00	15.20	15.00	17.00	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 2:00 PM	305.00	4.00	15.40	16.90	1.50	14.70	16.90	15.40	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 2:15 PM	15.00	2.20	17.10	17.60	0.50	17.10	19.40	17.60	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 2:30 PM	228.00	5.00	26.80	17.40	0.00	17.40	23.90	26.80	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 2:45 PM	210.00	4.20	19.90	21.90	2.00	21.90	18.50	19.90	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 3:00 PM	206.00	3.90	21.00	21.90	0.50	21.50	25.40	21.00	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 3:15 PM	202.00	3.30	21.10	26.30	5.20	26.30	24.50	21.10	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 3:30 PM	247.00	5.70	18.30	20.80	2.50	20.80	19.00	18.30	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 3:45 PM	217.00	3.60	16.90	15.70	0.00	15.70	35.10	16.90	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 4:00 PM	242.00	6.30	15.80	14.80	0.00	14.80	12.70	15.80	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 4:15 PM	31.00	6.70	15.10	15.60	0.50	15.10	13.50	15.60	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 4:30 PM	14.00	6.80	15.00	15.00	0.00	15.00	13.00	15.00	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 4:45 PM	49.00	5.30	15.90	15.70	0.00	15.90	27.00	15.70	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:00 PM	50.00	3.30	13.70	15.20	1.50	13.70	12.20	15.20	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:15 PM	4.00	3.40	18.10	18.40	0.30	18.10	19.20	18.40	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:30 PM	14.00	5.20	15.70	15.60	0.00	15.70	17.40	15.60	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 5:45 PM	11.00	4.90	116.10	21.00	0.00	116.10	15.40	21.00	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:00 PM	25.00	4.60	14.20	17.80	3.60	14.20	14.80	17.80	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:15 PM	33.00	4.20	13.30	18.60	5.30	13.30	18.60	18.60	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:30 PM	41.00	5.70	16.60	15.10	0.00	16.60	16.50	15.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 6:45 PM	36.00	5.30	20.60	15.60	0.00	20.60	16.00	15.60	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:00 PM	39.00	5.90	15.30	15.90	0.60	15.30	20.10	15.90	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:15 PM	42.00	5.70	23.00	15.30	0.00	23.00	15.90	15.30	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:30 PM	43.00	5.60	15.40	15.30	0.00	15.40	12.00	15.30	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 7:45 PM	38.00	5.30	13.60	18.60	5.00	13.60	14.00	18.60	12.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:00 PM	20.00	8.30	12.90	16.30	3.40	12.90	65.30	16.30	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:15 PM	21.00	9.00	12.70	15.60	2.90	12.70	14.70	15.60	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:30 PM	25.00	8.40	10.70	14.60	3.90	10.70	13.20	14.60	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/7/13 8:45 PM	30.00	6.30	13.40	18.00	4.60	13.40	18.50	18.00	15.40	0.00	0.00	0						



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates ($\mu\text{g}/\text{m}^3$)								Naphthalene ($\mu\text{g}/\text{m}^3$)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/9/13 6:00 AM	271.00	0.80	6.90	11.00	4.10	7.60	11.00	10.10	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:15 AM	226.00	1.00	9.10	8.50	0.00	8.50	11.10	9.10	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:30 AM	266.00	1.50	10.70	8.20	0.00	8.20	12.00	10.70	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:45 AM	276.00	1.30	6.00	13.60	7.60	11.60	13.60	9.50	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:00 AM	337.00	2.10	12.80	14.90	2.10	13.30	14.90	9.20	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:15 AM	292.00	0.50	13.80	26.40	12.60	14.00	26.40	11.20	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:30 AM	236.00	0.40	14.50	17.00	2.50	17.00	30.60	14.50	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:45 AM	245.00	0.60	16.00	17.00	1.00	17.00	29.90	16.00	27.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:00 AM	336.00	1.90	28.50	23.10	0.00	20.60	23.10	13.50	28.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:15 AM	351.00	2.40	33.30	29.60	0.00	24.40	29.60	20.70	33.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:30 AM	337.00	2.90	23.50	37.70	14.20	28.70	37.70	24.30	23.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:45 AM	19.00	2.30	23.90	22.70	0.00	23.90	31.50	22.70	26.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:00 AM	344.00	1.40	18.50	20.40	1.90	21.60	20.40	11.60	18.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:15 AM	20.00	0.80	17.30	14.00	0.00	17.30	20.10	14.00	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:30 AM	343.00	1.30	7.60	15.40	7.80	7.80	15.40	16.20	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:45 AM	36.00	1.00	7.90	9.20	1.30	7.90	10.80	9.20	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 10:00 AM	18.00	1.90	10.90	11.70	0.80	10.90	12.50	11.70	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 10:15 AM	11.00	1.60	16.30	14.70	0.00	16.30	18.30	14.70	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 10:30 AM	21.00	2.70	37.80	30.50	0.00	37.80	16.60	30.50	309.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 10:45 AM	8.00	1.60	18.70	15.90	0.00	18.70	18.90	15.90	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 11:00 AM	329.00	1.10	21.40	18.60	0.00	22.10	18.60	25.20	21.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 11:15 AM	307.00	0.60	26.00	22.30	0.00	25.00	22.30	24.30	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 11:30 AM	277.00	1.60	26.40	23.90	0.00	24.30	23.90	28.00	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 11:45 AM	222.00	1.50	32.00	31.10	0.00	31.10	31.40	32.00	32.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 12:00 PM	37.00	1.70	26.50	39.80	13.30	26.50	25.10	39.80	54.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 12:15 PM	269.00	2.30	24.80	25.70	0.90	25.70	24.80	24.80	29.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 12:30 PM	204.00	3.40	22.50	22.90	0.40	22.90	21.30	22.50	29.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 12:45 PM	294.00	1.20	32.80	19.20	0.00	20.90	19.20	24.70	32.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 1:00 PM	221.00	1.00	23.80	21.50	0.00	21.50	20.70	23.80	32.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 1:15 PM	310.00	0.50	38.00	20.90	0.00	24.30	20.90	23.20	38.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 1:30 PM	2.00	0.40	26.00	21.50	0.00	26.00	58.00	21.50	41.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 1:45 PM	339.00	1.30	45.10	31.80	0.00	30.30	31.80	22.30	45.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 2:00 PM	97.00	2.30	26.30	39.70	13.40	30.80	26.30	24.00	39.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 2:15 PM	133.00	3.60	42.50	146.30	103.80	37.00	42.50	22.60	146.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 2:30 PM	159.00	0.90	33.70	22.70	0.00	30.10	33.70	20.00	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 2:45 PM	156.00	1.70	34.70	22.90	0.00	26.50	34.70	18.60	22.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 3:00 PM	223.00	1.70	17.70	32.40	14.70	32.40	64.20	17.70	26.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 3:15 PM	311.00	3.20	38.50	94.80	56.30	27.90	94.80	29.20	38.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 3:30 PM	259.00	2.30	24.90	28.30	3.40	28.30	30.20	24.90	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 3:45 PM	251.00	3.20	27.30	32.40	5.10	32.40	43.00	27.30	32.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 4:00 PM	292.00	4.30	39.70	48.50	8.80	35.50	48.50	32.00	39.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 4:15 PM	268.00	3.10	14.40	19.90	5.50	19.90	17.40	14.40	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 4:30 PM	284.00	2.60	20.30	18.70	0.00	21.00	18.70	14.30	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 4:45 PM	303.00	2.10	20.40	21.30	0.90	21.50	21.30	17.30	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 5:00 PM	276.00	5.00	23.40	22.50	0.00	21.70	22.50	16.30	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 5:15 PM	302.00	2.30	21.50	21.50	0.00	21.00	21.50	16.00	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 5:30 PM	276.00	3.30	18.60	19.30	0.70	18.50	19.30	14.60	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 5:45 PM	278.00	2.60	18.40	20.40	2.00	17.80	20.40	13.90	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:00 PM	271.00	2.30	11.30	13.40	2.10	12.40	13.40	10.90	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:15 PM	263.00	4.40	11.30	16.40	5.10	16.40	15.40	11.30	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:30 PM	277.00	3.10	13.50	13.50	0.00	15.00	13.50	11.40	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 6:45 PM	289.00	2.80	14.80	14.60	0.00	16.20	14.60	13.10	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:00 PM	267.00	3.80	14.10	17.80	3.70	17.80	16.70	14.10	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:15 PM	288.00	2.30	16.30	17.50	1.20	20.10	17.50	17.00	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:30 PM	278.00	2.80	16.10	17.30	1.20	19.20	17.30	14.00	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 7:45 PM	276.00	3.40	19.80	18.90	0.00	19.70	18.90	14.90	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:00 PM	274.00	2.20	16.00	17.20	1.20	19.90	17.20	14.40	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:15 PM	294.00	3.60	17.80	19.30	1.50	22.50	19.30	15.10	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:30 PM	288.00	2.80	16.60	21.50	4.90	21.20	21.50	19.10	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 8:45 PM	286.00	2.50	16.50	22.80	6.30	20.90	22.80	17.50	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:00 PM	268.00	2.10	19.70	21.10	1.40	21.10	31.20	19.70	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:15 PM	268.00	2.30	20.00	21.80	1.80	21.80	29.90	20.00	17.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:30 PM	279.00	2.40	16.50	28.30	11.80	20.80	28.30	19.20	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 9:45 PM	262.00	3.20	17.10	21.30	4.20	21.30	26.30	17.10	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 10:00 PM	293.00	2.50	16.40	26.20	9.80	20.40	26.20	19.10	16.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/9/13 10:15 PM	272.00	1.70	20.90	30.10	9.20	24												



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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/11/13 7:30 AM	300.00	2.00	15.70	15.90	0.20	18.20	15.90	13.80	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 7:45 AM	355.00	2.00	18.10	15.50	0.00	17.10	15.50	15.30	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:00 AM	318.00	1.80	19.10	19.00	0.00	20.30	19.00	17.50	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:15 AM	296.00	1.10	22.50	21.60	0.00	21.60	21.60	19.20	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:30 AM	240.00	1.20	21.00	16.50	0.00	16.50	22.30	21.00	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:45 AM	267.00	1.70	18.70	11.70	0.00	11.70	12.20	18.70	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:00 AM	9.00	0.90	14.20	12.90	0.00	14.20	13.00	12.90	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:15 AM	345.00	1.40	10.20	11.20	1.00	14.10	11.20	9.30	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:30 AM	352.00	1.70	8.60	12.20	3.60	13.40	12.20	10.20	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:45 AM	21.00	2.20	9.70	10.30	0.60	9.70	10.80	10.30	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:00 AM	15.00	1.90	7.40	10.00	2.60	7.40	9.80	10.00	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:15 AM	11.00	1.80	6.10	7.00	0.90	6.10	8.10	7.00	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:30 AM	16.00	2.00	7.60	8.50	0.90	7.60	10.50	8.50	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:45 AM	67.00	2.40	7.50	9.30	1.80	7.50	9.10	9.30	6.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:00 AM	19.00	1.60	7.00	8.30	1.30	7.00	9.90	8.30	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:15 AM	187.00	4.50	9.40	8.40	0.00	8.40	7.80	9.40	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:30 AM	178.00	2.90	9.50	7.80	0.00	9.90	9.50	9.00	7.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:45 AM	89.00	2.40	9.90	12.90	3.00	9.90	11.00	12.90	9.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 12:00 PM	17.00	0.90	11.70	13.00	1.30	11.70	13.40	13.00	11.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 12:15 PM	61.00	2.00	13.70	13.20	0.00	13.70	15.30	13.20	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 12:30 PM	108.00	2.50	19.80	21.30	1.50	16.40	19.80	19.20	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 12:45 PM	65.00	1.60	17.20	20.50	3.30	17.20	17.50	20.50	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 1:00 PM	137.00	2.50	19.00	30.20	11.20	23.50	19.00	23.70	30.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 1:15 PM	89.00	3.20	15.20	17.70	2.50	15.20	17.30	17.70	24.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 1:30 PM	122.00	4.70	16.40	28.20	11.80	15.70	16.40	16.20	28.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 1:45 PM	75.00	5.20	19.00	26.40	7.40	19.00	19.00	26.40	46.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 2:00 PM	112.00	1.60	15.20	44.10	28.90	22.20	15.20	20.00	44.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 2:15 PM	84.00	4.70	17.60	20.80	3.20	17.60	15.90	20.80	37.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 2:30 PM	130.00	4.50	16.40	39.70	23.30	28.00	16.40	17.30	39.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 2:45 PM	77.00	3.80	40.00	27.00	0.00	40.00	21.00	27.00	49.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 3:00 PM	122.00	2.90	20.20	52.60	32.40	50.90	20.20	25.40	52.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 3:15 PM	127.00	3.40	15.20	39.60	24.40	20.10	15.20	20.90	39.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 3:30 PM	143.00	4.10	12.50	19.20	6.70	18.50	12.50	14.70	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 3:45 PM	70.00	2.40	20.90	16.90	0.00	20.90	13.00	16.90	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 4:00 PM	80.00	3.20	19.70	16.40	0.00	19.70	15.00	16.40	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 4:15 PM	74.00	2.80	19.00	17.30	0.00	19.00	15.50	17.30	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 4:30 PM	79.00	2.60	13.30	16.50	3.20	13.30	13.30	16.50	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 4:45 PM	121.00	3.70	16.20	19.10	2.90	17.10	16.20	19.20	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 5:00 PM	135.00	2.30	17.40	23.60	6.20	23.40	17.40	22.00	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 5:15 PM	136.00	3.20	19.60	23.10	3.50	18.60	19.60	21.20	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 5:30 PM	122.00	2.30	16.90	21.30	4.40	16.80	16.90	19.40	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 5:45 PM	130.00	2.60	15.60	22.50	6.90	20.10	15.60	15.30	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 6:00 PM	139.00	1.50	14.30	22.50	8.20	20.90	14.30	17.80	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 6:15 PM	126.00	1.60	16.10	22.20	6.10	19.80	16.10	16.20	22.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 6:30 PM	87.00	1.10	19.10	17.40	0.00	19.10	16.10	17.40	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 6:45 PM	261.00	3.00	19.40	20.20	0.80	20.20	18.80	19.40	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 7:00 PM	299.00	2.90	24.80	21.20	0.00	22.30	21.20	21.20	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 7:15 PM	3.00	2.60	23.90	20.90	0.00	23.90	21.30	20.90	26.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 7:30 PM	1.00	2.50	24.40	27.70	3.30	24.40	22.40	27.70	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 7:45 PM	332.00	2.00	23.40	20.10	0.00	22.40	20.10	22.20	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:00 PM	3.00	0.50	22.50	13.80	0.00	22.50	17.00	13.80	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:15 PM	313.00	0.80	20.90	23.00	2.10	26.70	23.00	21.50	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:30 PM	269.00	0.60	18.20	24.00	5.80	24.00	20.90	18.20	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 8:45 PM	236.00	1.10	14.20	20.80	6.60	20.80	20.90	14.20	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:00 PM	216.00	0.90	13.50	19.60	6.10	19.60	18.20	13.50	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:15 PM	223.00	2.70	14.20	18.80	4.60	18.80	19.00	14.20	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:30 PM	248.00	2.10	14.30	24.60	10.30	24.60	19.30	14.30	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 9:45 PM	215.00	3.00	15.40	23.80	8.40	23.80	17.30	15.40	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:00 PM	211.00	1.80	15.30	22.80	7.50	22.80	17.80	15.30	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:15 PM	211.00	1.40	13.80	0.00	0.00	0.00	17.30	13.80	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:30 PM	226.00	1.60	13.70	18.40	4.70	18.40	17.90	13.70	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 10:45 PM	205.00	1.20	13.40	17.20	3.80	17.20	17.90	13.40	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:00 PM	176.00	1.50	17.30	14.90	0.00	18.10	17.30	13.60	14.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:15 PM	214.00	2.10	13.40	17.60	4.20	17.60	17.00	13.40	14.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:30 PM	227.00	1.90	13.40	17.90	4.50	17.90	16.60	13.40	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/11/13 11:45 PM	227.00	1.80	14.00	18.00	4.00	18.00	17.60	14.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/13 12:00 AM	221.00	1.90	14.10	18.30	4.20	18.30	16.80	14.10	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/13 12:15 AM	212.00	1.50	14.60	17.90	3.30	17.90	17.20	14.60	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/12/13 12:30 AM	213.00	3.00	14.50	18.60	4.10	18.60	17.40	14.50	13.70	0.00	0					



US Army Corps
of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/13/13 9:00 AM	37.00	9.00	7.70	21.40	13.70	7.70	7.90	21.40	27.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:15 AM	35.00	8.10	6.40	11.10	4.70	6.40	6.30	11.10	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:30 AM	58.00	8.20	8.70	15.90	7.20	8.70	16.20	15.90	10.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:45 AM	20.00	8.50	10.70	9.00	0.00	10.70	8.80	9.00	11.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:00 AM	52.00	8.10	9.50	6.20	0.00	9.50	67.70	6.20	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:15 AM	11.00	10.10	7.90	9.40	1.50	7.90	76.10	9.40	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:30 AM	40.00	9.30	4.70	10.40	5.70	4.70	12.00	10.40	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:45 AM	35.00	11.30	8.30	11.90	3.60	8.30	26.00	11.90	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:00 AM	39.00	9.00	9.20	12.50	3.30	9.20	32.90	12.50	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:15 AM	38.00	8.80	14.50	32.60	18.10	14.50	15.20	32.60	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:30 AM	38.00	8.90	9.80	7.80	0.00	9.80	175.90	7.80	8.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:45 AM	40.00	9.50	11.60	5.90	0.00	11.60	32.80	5.90	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 12:00 PM	32.00	7.40	8.40	5.80	0.00	8.40	20.70	5.80	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 12:15 PM	34.00	6.20	17.00	5.80	0.00	17.00	16.10	5.80	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 12:30 PM	37.00	8.00	6.40	11.20	4.80	6.40	39.60	11.20	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 12:45 PM	25.00	6.00	15.30	7.30	0.00	15.30	22.80	7.30	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 1:00 PM	60.00	8.00	4.30	14.40	10.10	4.30	27.80	14.40	10.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 1:15 PM	21.00	6.90	8.50	3.00	0.00	8.50	10.70	3.00	-0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 1:30 PM	8.00	8.90	4.90	2.90	0.00	4.90	9.40	2.90	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 1:45 PM	18.00	6.10	5.10	3.90	0.00	5.10	7.20	3.90	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 2:00 PM	11.00	9.50	5.80	3.80	0.00	5.80	12.40	3.80	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 2:15 PM	23.00	7.60	0.00	8.20	0.00	0.00	9.50	8.20	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 2:30 PM	9.00	7.20	9.50	8.30	0.00	9.50	4.20	8.30	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 2:45 PM	14.00	14.80	5.90	1.40	0.00	5.90	5.10	1.40	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 3:00 PM	8.00	7.10	9.60	3.60	0.00	9.60	16.00	3.60	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 3:15 PM	16.00	6.80	6.10	2.40	0.00	6.10	6.30	2.40	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 3:30 PM	20.00	7.70	9.00	3.30	0.00	9.00	9.70	3.30	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 3:45 PM	28.00	10.30	12.20	4.20	0.00	12.20	8.50	4.20	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 4:00 PM	10.00	11.50	37.60	2.90	0.00	37.60	18.40	2.90	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 4:15 PM	22.00	9.20	22.00	3.80	0.00	22.00	25.90	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 4:30 PM	10.00	12.10	21.10	3.90	0.00	21.10	32.00	3.90	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 4:45 PM	44.00	7.10	9.30	5.70	0.00	9.30	24.50	5.70	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 5:00 PM	19.00	7.80	10.10	3.50	0.00	10.10	12.30	3.50	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 5:15 PM	29.00	8.90	7.50	4.80	0.00	7.50	31.10	4.80	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 5:30 PM	27.00	7.90	7.50	5.80	0.00	7.50	11.40	5.80	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 5:45 PM	29.00	6.10	8.20	5.40	0.00	8.20	5.00	5.40	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 6:00 PM	38.00	6.70	11.40	9.90	0.00	11.40	2.50	9.90	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 6:15 PM	36.00	4.80	4.50	10.20	5.70	4.50	3.30	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 6:30 PM	33.00	6.90	10.10	4.20	0.00	10.10	2.90	4.20	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 6:45 PM	65.00	5.40	4.60	4.80	0.20	4.60	4.40	4.80	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 7:00 PM	38.00	5.60	3.80	1.30	0.00	3.80	123.30	1.30	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 7:15 PM	45.00	5.30	7.40	5.00	0.00	7.40	192.60	5.00	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 7:30 PM	52.00	5.40	5.80	1.80	0.00	5.80	5.80	1.80	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 7:45 PM	35.00	5.50	7.60	8.60	1.00	7.60	5.70	8.60	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 8:00 PM	41.00	4.90	4.50	4.30	0.00	4.50	4.90	4.30	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 8:15 PM	59.00	5.10	10.00	6.20	0.00	10.00	5.50	6.20	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 8:30 PM	33.00	7.30	6.50	4.50	0.00	6.50	15.10	4.50	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 8:45 PM	33.00	6.80	5.60	5.50	0.00	5.60	5.40	5.50	12.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:00 PM	47.00	6.60	5.50	4.30	0.00	5.50	5.70	4.30	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:15 PM	39.00	7.10	6.20	4.20	0.00	6.20	14.20	4.20	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:30 PM	62.00	5.50	5.80	5.10	0.00	5.80	5.60	5.10	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 9:45 PM	52.00	5.20	5.10	7.10	2.00	5.10	15.10	7.10	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:00 PM	36.00	6.70	6.70	7.00	0.30	6.70	9.30	7.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:15 PM	36.00	5.60	6.00	7.30	1.30	6.00	4.70	7.30	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:30 PM	37.00	6.00	5.80	5.50	0.00	5.80	7.00	5.50	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 10:45 PM	51.00	6.40	4.90	4.30	0.00	4.90	5.70	4.30	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:00 PM	31.00	5.90	4.60	3.70	0.00	4.60	3.10	3.70	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:15 PM	42.00	7.40	6.80	8.20	1.40	6.80	4.70	8.20	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:30 PM	48.00	7.70	4.20	4.00	0.00	4.20	3.30	4.00	7.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/13/13 11:45 PM	48.00	6.30	6.50	6.90	0.40	6.50	5.20	6.90	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 12:00 AM	44.00	5.30	4.90	4.40	0.00	4.90	3.80	4.40	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 12:15 AM	38.00	5.50	8.30	5.20	0.00	8.30	8.50	5.20	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 12:30 AM	44.00	3.90	4.80	2.70	0.00	4.80	3.70	2.70	-0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 12:45 AM	46.00	4.60	6.90	8.50	1.60	6.90	13.70	8.50	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 1:00 AM	47.00	5.50	7.10	8.40	1.30	7.10	8.40	8.40	-0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 1:15 AM	35.00	6.10	5.50	13.20	7.70	5.50	7.10	13.20	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 1:30 AM	39.00	6.60	9.10	8.40	0.00	9.10	3.50	8.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 1:45 AM	43.00	6.90	9.40	9.70	0.30	9.40	6.80	9.70	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 2:00 AM	45.00	5.30	5.60	11.80	6.20	5.60	6.30	11.80	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 2:15 AM	40.00	5.60	4.70	2.80	0.00	4.70	4.40	2.80	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/14/13 2:30 AM	38.00	5.30	14.00	9.70	0.00	14.00	7.60	9.70</										



US Army Corps
of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/16/13 11:15 AM	79.00	2.40	59.00	66.80	7.80	59.00	86.70	66.80	64.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 11:30 AM	130.00	3.50	61.80	66.30	4.50	47.20	61.80	61.20	66.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 11:45 AM	58.00	3.40	31.30	38.50	7.20	31.30	666.60	38.50	51.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 12:00 PM	123.00	3.90	108.30	22.30	0.00	23.50	108.30	23.20	22.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 12:15 PM	140.00	4.30	24.00	39.20	15.20	24.30	24.00	21.80	39.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 12:30 PM	124.00	4.30	30.40	38.40	8.00	33.20	30.40	25.00	38.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 12:45 PM	134.00	2.50	57.60	32.50	0.00	28.10	57.60	28.90	32.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 1:00 PM	104.00	4.60	26.00	23.60	0.00	19.40	26.00	34.60	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 1:15 PM	114.00	3.30	40.00	19.90	0.00	20.10	40.00	17.20	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 1:30 PM	71.00	3.00	27.40	19.60	0.00	27.40	32.40	19.60	34.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 1:45 PM	31.00	2.50	20.50	18.50	0.00	20.50	32.30	18.50	33.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 2:00 PM	61.00	2.80	22.10	159.60	137.50	22.10	23.00	159.60	37.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 2:15 PM	24.00	4.90	20.70	17.60	0.00	20.70	30.40	17.60	38.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 2:30 PM	47.00	2.70	25.70	25.40	0.00	25.70	20.50	25.40	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 2:45 PM	32.00	3.00	37.80	22.80	0.00	37.80	29.90	22.80	30.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 3:00 PM	59.00	2.00	35.00	29.70	0.00	35.00	25.20	29.70	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 3:15 PM	25.00	4.10	22.40	31.10	8.70	22.40	43.70	31.10	42.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 3:30 PM	25.00	3.60	34.50	28.40	0.00	34.50	33.90	28.40	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 3:45 PM	22.00	5.40	36.00	30.40	0.00	36.00	30.30	30.40	25.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 4:00 PM	16.00	5.10	30.70	32.10	1.40	30.70	52.40	32.10	37.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 4:15 PM	54.00	4.80	26.80	31.40	4.60	26.80	30.90	31.40	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 4:30 PM	39.00	4.40	21.40	29.00	7.60	21.40	26.20	29.00	17.20	0.00	0.00	0.00	0.00	1.70	0.00	0.00		
8/16/13 4:45 PM	12.00	4.30	18.90	22.10	3.20	18.90	20.90	22.10	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 5:00 PM	14.00	4.40	19.20	23.30	4.10	19.20	20.60	23.30	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 5:15 PM	52.00	5.00	19.50	21.30	1.80	19.50	25.40	21.30	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 5:30 PM	30.00	3.70	20.60	19.10	0.00	20.60	31.30	19.10	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 5:45 PM	55.00	3.60	20.80	17.50	0.00	20.80	19.10	17.50	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 6:00 PM	15.00	6.40	21.20	16.60	0.00	21.20	22.40	16.60	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 6:15 PM	46.00	4.10	22.20	23.50	1.30	22.20	25.90	23.50	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 6:30 PM	68.00	3.00	19.10	31.30	12.20	19.10	18.20	31.30	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 6:45 PM	98.00	3.10	21.30	22.40	1.10	16.30	21.30	18.10	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 7:00 PM	88.00	3.70	14.50	15.70	1.20	14.50	27.00	15.70	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 7:15 PM	59.00	2.80	17.20	15.20	0.00	17.20	18.10	15.20	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 7:30 PM	64.00	3.50	14.90	23.00	8.10	14.90	30.70	23.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 7:45 PM	81.00	2.80	29.10	20.90	0.00	29.10	24.70	20.90	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 8:00 PM	74.00	2.80	18.90	21.20	2.30	18.90	31.90	21.20	19.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 8:15 PM	75.00	2.40	18.00	33.60	15.60	18.00	155.70	33.60	18.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 8:30 PM	77.00	2.50	17.10	21.80	4.70	17.10	32.50	21.80	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 8:45 PM	81.00	2.60	13.90	23.20	9.30	13.90	34.00	23.20	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 9:00 PM	69.00	4.00	21.40	19.30	0.00	21.40	35.70	19.30	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 9:15 PM	108.00	4.20	24.00	15.30	0.00	17.20	24.00	21.90	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 9:30 PM	116.00	2.80	36.90	18.70	0.00	22.40	36.90	23.40	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 9:45 PM	104.00	3.10	38.10	17.70	0.00	22.00	38.10	17.70	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 10:00 PM	105.00	2.70	24.80	17.10	0.00	19.40	24.80	13.80	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 10:15 PM	88.00	4.20	21.80	16.60	0.00	21.80	31.50	16.60	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 10:30 PM	73.00	4.50	22.60	22.20	0.00	22.60	30.30	22.20	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 10:45 PM	101.00	1.50	29.70	17.90	0.00	20.80	29.70	25.40	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 11:00 PM	123.00	1.70	35.30	15.40	0.00	19.20	35.30	23.60	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 11:15 PM	129.00	3.10	27.50	15.10	0.00	17.50	27.50	16.50	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 11:30 PM	130.00	1.90	19.20	17.40	0.00	16.30	19.20	17.20	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/16/13 11:45 PM	105.00	2.50	23.00	11.90	0.00	14.50	23.00	15.10	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 12:00 AM	100.00	2.30	17.90	10.30	0.00	13.60	17.90	12.10	10.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 12:15 AM	80.00	1.70	13.50	12.20	0.00	13.50	15.30	12.20	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 12:30 AM	106.00	3.10	14.70	9.40	0.00	14.20	14.70	12.20	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 12:45 AM	128.00	3.60	17.90	9.50	0.00	13.30	17.90	17.00	9.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 1:00 AM	112.00	2.80	24.30	8.90	0.00	10.50	24.30	20.40	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 1:15 AM	182.00	1.60	20.90	11.30	0.00	11.30	31.30	20.90	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 1:30 AM	168.00	1.50	21.70	10.40	0.00	12.10	21.70	19.30	10.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 1:45 AM	246.00	0.40	15.40	11.70	0.00	11.70	19.60	15.40	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 2:00 AM	181.00	0.90	14.20	0.00	0.00	0.00	19.50	14.20	12.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 2:15 AM	199.00	0.80	29.30	14.20	0.00	14.20	27.20	29.30	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 2:30 AM	269.00	0.50	38.70	35.60	0.00	35.60	53.50	38.70	40.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 2:45 AM	280.00	1.10	42.80	52.90	10.10	39.50	52.90	38.10	42.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 3:00 AM	260.00	0.90	32.50	40.30	7.80	40.30	51.70	32.50	40.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 3:15 AM	259.00	1.70	34.80	35.10	0.30	35.10	48.90	34.80	37.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 3:30 AM	258.00	1.20	35.30	44.60	9.30	44.60	46.40	35.30	32.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 3:45 AM	275.00	1.20	36.90	43.60	6.70	40.40	43.60	38.40	36.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 4:00 AM	229.00	0.80	36.50	42.80	6.30	42.80	44.80	36.50	35.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
8/17/13 4:15 AM	230.00	0.70	37.10	45.50	8.40	45.50	46.60											



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Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/17/13 12:00 PM	129.00	3.70	13.20	11.30	0.00	11.70	13.20	13.80	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 12:15 PM	135.00	3.90	13.10	16.20	3.10	16.30	13.10	11.80	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 12:30 PM	109.00	4.50	18.10	14.60	0.00	14.90	18.10	13.60	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 12:45 PM	119.00	6.10	16.10	13.20	0.00	14.80	16.10	12.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 1:00 PM	55.00	4.90	16.20	21.90	5.70	16.20	17.60	21.90	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 1:15 PM	81.00	6.50	20.30	19.20	0.00	20.30	24.60	19.20	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 1:30 PM	105.00	2.30	22.60	14.50	0.00	16.30	22.60	19.40	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 1:45 PM	120.00	3.20	21.80	16.90	0.00	17.40	21.80	16.20	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 2:00 PM	131.00	4.80	23.90	20.90	0.00	20.80	23.90	18.60	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 2:15 PM	144.00	4.30	23.20	26.20	3.00	23.40	23.20	20.20	26.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 2:30 PM	87.00	1.90	24.00	20.20	0.00	24.00	22.60	20.20	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 2:45 PM	124.00	2.30	22.50	22.20	0.00	22.50	22.50	19.70	22.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 3:00 PM	92.00	3.30	19.50	28.10	8.60	27.00	19.50	18.30	28.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 3:15 PM	136.00	3.10	20.10	23.20	3.10	25.20	20.10	18.20	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 3:30 PM	114.00	2.50	20.30	18.30	0.00	20.20	20.30	22.00	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 3:45 PM	73.00	4.80	23.30	27.00	3.70	23.30	23.40	27.00	25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 4:00 PM	16.00	7.50	20.30	29.50	9.20	20.30	27.30	29.50	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 4:15 PM	16.00	8.70	21.40	28.70	7.30	21.40	17.50	28.70	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 4:30 PM	28.00	7.30	17.70	21.10	3.40	17.70	23.60	21.10	18.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 4:45 PM	28.00	7.90	16.20	21.90	5.70	16.20	27.90	21.90	21.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 5:00 PM	43.00	8.40	15.80	18.20	2.40	15.80	18.80	18.20	15.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 5:15 PM	19.00	7.20	16.10	19.90	3.80	16.10	17.40	19.90	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 5:30 PM	34.00	8.00	15.70	16.80	1.10	15.70	16.30	16.80	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 5:45 PM	43.00	6.10	16.20	18.30	2.10	16.20	14.50	18.30	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 6:00 PM	32.00	6.90	15.90	14.60	0.00	15.90	14.60	14.60	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 6:15 PM	31.00	6.30	13.80	15.00	1.20	13.80	17.60	15.00	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 6:30 PM	47.00	6.50	13.30	13.60	0.30	13.30	14.30	13.60	14.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 6:45 PM	51.00	5.50	13.30	24.80	11.50	13.30	29.00	24.80	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 7:00 PM	50.00	3.80	12.80	16.50	3.70	12.80	17.70	16.50	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 7:15 PM	54.00	3.30	13.40	16.60	3.20	13.40	15.20	16.60	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 7:30 PM	51.00	3.70	11.10	13.40	2.30	11.10	11.90	13.40	25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 7:45 PM	73.00	2.80	10.10	14.20	4.10	10.10	13.40	14.20	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 8:00 PM	71.00	3.30	12.10	20.90	8.80	12.10	34.80	20.90	9.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 8:15 PM	49.00	3.20	19.30	19.60	0.30	19.30	21.90	19.60	11.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 8:30 PM	73.00	2.50	12.90	15.90	3.00	12.90	31.70	15.90	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 8:45 PM	56.00	2.50	0.00	18.70	0.00	0.00	196.90	18.70	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 9:00 PM	87.00	1.60	12.20	40.40	28.20	12.20	34.00	40.40	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 9:15 PM	68.00	2.00	40.70	27.10	0.00	40.70	37.30	27.10	21.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 9:30 PM	70.00	2.30	17.30	30.60	13.30	17.30	29.00	30.60	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 9:45 PM	60.00	2.50	27.80	34.40	6.60	27.80	44.10	34.40	26.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 10:00 PM	70.00	2.50	14.80	27.40	12.60	14.80	30.60	27.40	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 10:15 PM	86.00	1.70	31.40	42.00	10.60	31.40	43.90	42.00	33.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 10:30 PM	154.00	1.40	45.40	19.70	0.00	21.60	45.40	36.70	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 10:45 PM	80.00	2.50	32.40	48.00	15.60	32.40	52.70	48.00	26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 11:00 PM	70.00	3.80	0.00	40.20	0.00	0.00	56.50	40.20	36.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 11:15 PM	71.00	3.60	37.20	46.80	9.60	37.20	47.60	46.80	38.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 11:30 PM	58.00	3.60	56.80	27.80	0.00	56.80	23.40	27.80	32.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/17/13 11:45 PM	75.00	3.70	38.20	24.90	0.00	38.20	22.10	24.90	33.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 12:00 AM	84.00	2.10	41.80	24.60	0.00	41.80	30.20	24.60	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 12:15 AM	77.00	2.60	44.00	22.80	0.00	44.00	23.70	22.80	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 12:30 AM	71.00	3.80	26.80	29.90	3.10	26.80	20.30	29.90	14.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 12:45 AM	76.00	3.00	30.40	21.20	0.00	30.40	21.60	21.20	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 1:00 AM	81.00	4.00	35.00	20.80	0.00	35.00	18.70	20.80	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 1:15 AM	89.00	4.00	0.00	17.50	0.00	0.00	16.90	17.50	24.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 1:30 AM	85.00	2.10	23.10	17.10	0.00	23.10	17.10	17.10	24.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 1:45 AM	73.00	2.70	26.30	18.30	0.00	26.30	18.90	18.30	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 2:00 AM	77.00	1.70	27.80	19.30	0.00	27.80	19.60	19.30	27.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 2:15 AM	260.00	0.70	19.40	27.70	8.30	27.70	19.10	19.40	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 2:30 AM	225.00	0.50	19.00	29.80	10.80	29.80	19.20	19.00	33.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 2:45 AM	219.00	0.60	19.80	25.00	5.20	25.00	19.70	19.80	27.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 3:00 AM	273.00	0.60	29.60	19.70	0.00	24.80	19.70	19.40	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 3:15 AM	199.00	1.00	20.20	24.20	4.00	24.20	20.80	20.20	32.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 3:30 AM	325.00	0.70	32.30	23.00	0.00	21.80	23.00	20.60	32.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 3:45 AM	153.00	0.50	23.00	34.60	11.60	29.90	23.00	20.00	34.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 4:00 AM	180.00	1.20	22.10	36.70	14.60	36.70	24.60	22.10	27.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 4:15 AM	165.00	0.50	24.90	33.80	8.90	43.60	24.90	23.30	33.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 4:30 AM	181.00	0.40	31.40	49.70	18.30	49.70	36.90	31.40	48.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 4:45 AM	167.00	1.20	45.40	71.80	26.40	82.80	45.40	39.60	71.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/18/13 5:00 AM	182.00	1.20	42.80	73.70	30.90	73.70	42.10	42.80								



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/18/13 12:45 PM	83.00	4.50	38.70	30.80	0.00	38.70	24.90	30.80	34.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 1:00 PM	122.00	4.20	14.60	30.40	15.80	30.60	14.60	17.10	30.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 1:15 PM	65.00	3.80	29.50	15.50	0.00	29.50	15.80	15.50	30.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 1:30 PM	62.00	4.90	25.80	14.90	0.00	25.80	13.40	14.90	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 1:45 PM	59.00	1.50	23.50	18.30	0.00	23.50	13.30	18.30	28.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 2:00 PM	17.00	6.30	22.50	16.70	0.00	22.50	14.70	16.70	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 2:15 PM	46.00	5.50	21.30	19.90	0.00	21.30	59.00	19.90	27.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 2:30 PM	47.00	6.50	24.90	23.10	0.00	24.90	18.90	23.10	23.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 2:45 PM	34.00	5.00	24.00	32.00	8.00	24.00	20.70	32.00	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 3:00 PM	42.00	6.20	28.60	26.00	0.00	28.60	36.10	26.00	20.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 3:15 PM	21.00	6.80	18.10	21.80	3.70	18.10	24.30	21.80	19.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 3:30 PM	44.00	5.30	22.00	25.00	3.00	22.00	31.80	25.00	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 3:45 PM	20.00	7.10	0.00	27.40	0.00	0.00	27.50	27.40	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 4:00 PM	45.00	5.70	18.00	22.10	4.10	18.00	21.70	22.10	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 4:15 PM	38.00	6.90	0.00	21.70	0.00	0.00	25.10	21.70	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 4:30 PM	31.00	5.20	18.10	20.60	2.50	18.10	21.30	20.60	17.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 4:45 PM	37.00	5.20	19.70	27.30	7.60	19.70	34.90	27.30	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 5:00 PM	27.00	5.40	18.40	17.50	0.00	18.40	17.80	17.50	27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 5:15 PM	23.00	5.30	28.70	18.90	0.00	28.70	26.60	18.90	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 5:30 PM	31.00	5.90	23.90	19.50	0.00	23.90	17.60	19.50	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 5:45 PM	38.00	4.80	20.30	17.70	0.00	20.30	17.40	17.70	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 6:00 PM	40.00	5.00	40.10	17.40	0.00	40.10	18.80	17.40	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 6:15 PM	45.00	4.40	17.50	21.10	3.60	17.50	20.40	21.10	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 6:30 PM	47.00	3.60	27.60	21.90	0.00	27.60	25.30	21.90	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 6:45 PM	90.00	2.80	37.20	42.20	5.00	33.70	37.20	30.30	42.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 7:00 PM	73.00	4.50	51.70	43.70	0.00	51.70	25.80	43.70	15.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 7:15 PM	97.00	3.10	27.90	19.60	0.00	17.80	27.90	26.40	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 7:30 PM	101.00	2.90	34.10	17.30	0.00	17.90	34.10	23.20	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 7:45 PM	93.00	3.00	66.60	24.10	0.00	21.10	66.60	28.10	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 8:00 PM	84.00	5.60	46.20	29.00	0.00	46.20	88.00	29.00	42.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 8:15 PM	102.00	3.50	21.30	41.60	20.30	31.90	21.30	30.50	41.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 8:30 PM	89.00	2.60	23.30	17.30	0.00	23.30	15.40	17.30	25.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 8:45 PM	77.00	4.30	22.30	17.10	0.00	22.30	20.70	17.10	29.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 9:00 PM	75.00	3.50	17.70	16.50	0.00	17.70	13.90	16.50	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 9:15 PM	118.00	2.80	14.60	15.70	1.10	17.20	14.60	15.50	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 9:30 PM	120.00	2.40	12.30	14.80	2.50	16.50	12.30	14.10	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 9:45 PM	59.00	1.90	15.50	14.40	0.00	15.50	12.30	14.40	12.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 10:00 PM	72.00	2.80	15.00	13.30	0.00	15.00	12.60	13.30	11.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 10:15 PM	73.00	2.30	14.60	14.00	0.00	14.60	15.00	14.00	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 10:30 PM	91.00	1.30	15.80	10.90	0.00	14.40	15.80	12.80	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 10:45 PM	109.00	0.90	13.30	12.70	0.00	14.80	13.30	13.20	12.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 11:00 PM	112.00	0.10	13.50	13.60	0.10	14.80	13.50	13.70	13.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 11:15 PM	224.00	0.60	13.70	13.60	0.80	14.50	12.30	13.70	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 11:30 PM	241.00	1.20	16.20	14.20	0.00	14.20	22.90	16.20	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/18/13 11:45 PM	238.00	1.00	12.90	14.50	1.60	14.50	14.00	12.90	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 12:00 AM	247.00	1.10	13.50	15.70	2.20	15.70	14.50	13.50	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 12:15 AM	234.00	1.10	14.60	17.00	2.40	17.00	16.60	14.60	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 12:30 AM	251.00	1.20	16.90	22.00	5.10	22.00	17.30	16.90	16.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 12:45 AM	253.00	0.70	17.10	22.80	5.70	22.80	18.80	17.10	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 1:00 AM	269.00	0.60	18.20	22.70	4.50	22.70	20.40	18.20	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 1:15 AM	261.00	1.30	19.00	25.20	6.20	25.20	26.10	19.00	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 1:30 AM	258.00	1.00	20.40	30.80	10.40	30.80	31.70	20.40	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 1:45 AM	265.00	1.10	21.40	30.50	9.10	30.50	39.10	21.40	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 2:00 AM	250.00	0.50	26.20	32.30	6.10	32.30	37.90	26.20	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 2:15 AM	243.00	0.60	27.20	35.20	8.00	35.20	45.60	27.20	24.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 2:30 AM	245.00	0.80	27.80	34.10	6.30	34.10	43.80	27.80	22.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 2:45 AM	262.00	1.20	28.90	35.10	6.20	35.10	40.70	28.90	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 3:00 AM	259.00	1.00	27.40	34.30	6.90	34.30	41.80	27.40	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 3:15 AM	213.00	0.70	28.60	36.30	7.70	36.30	39.70	28.60	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 3:30 AM	251.00	0.80	29.00	39.40	10.40	39.40	36.20	29.00	25.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 3:45 AM	196.00	0.70	32.10	36.70	4.60	36.70	37.30	32.10	29.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 4:00 AM	182.00	0.90	30.70	34.40	3.70	34.40	36.40	30.70	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 4:15 AM	222.00	0.40	27.80	35.20	7.40	35.20	34.00	27.80	26.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 4:30 AM	253.00	0.70	28.00	34.00	6.00	34.00	35.20	28.00	30.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 4:45 AM	197.00	0.40	27.60	32.60	5.00	32.60	34.40	27.60	37.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/19/13 5:00 AM	193.00	0.40</																



US Army Corps
of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/19/13 1:30 PM	121.00	2.20	17.20	22.80	5.60	24.00	17.20	20.50	22.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 1:45 PM	121.00	3.50	20.30	34.20	13.90	24.60	20.30	21.80	34.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 2:00 PM	105.00	2.60	20.00	30.30	10.30	43.30	20.00	21.40	30.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 2:15 PM	133.00	4.40	43.40	29.00	0.00	39.80	43.40	30.00	29.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 2:30 PM	85.00	5.80	37.90	32.20	0.00	37.90	270.30	32.20	42.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 2:45 PM	89.00	4.10	30.80	41.40	10.60	30.80	45.00	41.40	35.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 3:00 PM	76.00	4.10	26.70	33.70	7.00	26.70	40.90	33.70	33.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 3:15 PM	79.00	3.80	30.30	64.30	34.00	30.30	85.60	64.30	32.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 3:30 PM	132.00	4.00	63.30	32.50	0.00	33.80	63.30	51.70	32.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 3:45 PM	126.00	3.80	81.40	34.10	0.00	32.60	81.40	42.10	34.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 4:00 PM	118.00	4.70	88.10	40.80	0.00	38.10	88.10	41.00	40.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 4:15 PM	92.00	2.50	125.70	35.10	0.00	68.90	125.70	40.80	35.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 4:30 PM	140.00	3.30	41.80	34.20	0.00	37.20	41.80	34.80	34.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 4:45 PM	129.00	2.80	59.20	32.90	0.00	23.60	59.20	40.40	32.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 5:00 PM	126.00	2.00	39.90	32.10	0.00	27.00	39.90	29.60	32.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 5:15 PM	218.00	1.80	45.80	24.00	0.00	24.00	49.90	45.80	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 5:30 PM	206.00	2.70	27.20	25.70	0.00	25.70	36.50	27.20	30.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 5:45 PM	214.00	4.80	47.00	27.70	0.00	27.70	50.70	47.00	33.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 6:00 PM	220.00	3.30	28.30	46.00	17.70	46.00	94.90	28.30	41.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 6:15 PM	240.00	2.70	25.60	47.10	21.50	47.10	46.40	25.60	39.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 6:30 PM	249.00	4.90	18.00	19.60	1.60	19.60	19.40	18.00	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 6:45 PM	249.00	3.70	21.40	20.00	0.00	20.00	20.80	21.40	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 7:00 PM	253.00	2.60	18.30	18.50	0.20	18.50	86.00	18.30	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 7:15 PM	234.00	3.00	18.20	19.60	1.40	19.60	18.70	18.20	16.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 7:30 PM	241.00	2.60	18.30	20.00	1.70	20.00	18.40	18.30	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 7:45 PM	249.00	3.10	18.50	19.20	0.70	19.20	18.60	18.50	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 8:00 PM	257.00	2.20	17.70	18.60	0.90	18.60	18.90	17.70	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 8:15 PM	238.00	1.90	17.80	20.20	2.40	20.20	20.40	17.80	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 8:30 PM	245.00	1.70	17.90	20.90	3.00	20.90	21.20	17.90	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 8:45 PM	232.00	1.40	17.80	21.20	3.40	21.20	21.40	17.80	19.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 9:00 PM	221.00	1.50	17.70	20.90	3.20	20.90	22.90	17.70	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 9:15 PM	216.00	1.20	18.90	22.80	3.90	22.80	23.40	18.90	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 9:30 PM	226.00	1.70	18.40	22.60	4.20	22.60	23.50	18.40	18.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 9:45 PM	236.00	1.70	19.10	23.00	3.90	23.00	27.60	19.10	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 10:00 PM	220.00	2.10	20.10	24.90	4.80	24.90	30.50	20.10	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 10:15 PM	222.00	2.00	24.00	28.70	4.70	28.70	27.20	24.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 10:30 PM	224.00	1.60	30.10	27.70	0.00	27.70	27.60	30.10	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 10:45 PM	234.00	1.20	24.60	30.80	6.20	30.80	28.30	24.60	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 11:00 PM	226.00	1.50	29.40	29.90	0.50	29.90	29.50	29.40	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 11:15 PM	220.00	1.40	27.70	32.90	5.20	32.90	38.90	27.70	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 11:30 PM	210.00	1.70	30.00	35.70	5.70	35.70	37.20	30.00	25.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/19/13 11:45 PM	223.00	1.50	30.70	36.80	6.10	36.80	38.30	30.70	26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 12:00 AM	212.00	1.60	48.80	38.70	0.00	38.70	39.10	48.80	26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 12:15 AM	200.00	1.90	41.00	39.60	0.00	39.60	39.30	41.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 12:30 AM	217.00	2.10	35.10	36.60	1.50	36.60	37.20	35.10	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 12:45 AM	209.00	1.90	37.40	36.80	0.00	36.80	40.60	37.40	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 1:00 AM	217.00	1.90	41.20	40.70	0.00	40.70	43.20	41.20	25.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 1:15 AM	212.00	1.80	38.10	38.70	0.60	38.70	41.10	38.10	35.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 1:30 AM	220.00	2.10	37.20	37.80	0.60	37.80	41.10	37.20	32.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 1:45 AM	211.00	3.00	33.90	35.30	1.40	35.30	41.20	33.90	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 2:00 AM	217.00	2.00	32.00	33.90	1.90	33.90	37.20	32.00	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 2:15 AM	214.00	2.10	30.30	30.40	0.10	30.40	36.70	30.30	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 2:30 AM	189.00	2.00	42.70	43.20	0.50	43.20	45.00	42.70	36.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 2:45 AM	225.00	2.00	29.00	34.50	5.50	34.50	28.70	29.00	58.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:00 AM	206.00	2.00	23.90	26.00	2.10	26.00	27.40	23.90	21.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:15 AM	215.00	1.60	24.70	25.40	0.70	25.40	27.00	24.70	20.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:30 AM	217.00	1.80	25.70	26.90	1.20	26.90	28.40	25.70	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:45 AM	223.00	1.40	26.80	28.40	1.60	28.40	30.00	26.80	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:00 AM	212.00	1.60	27.60	27.60	0.00	27.60	29.00	27.60	23.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:15 AM	202.00	1.30	28.60	28.80	0.20	28.80	29.90	28.60	25.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:30 AM	199.00	1.40	29.90	30.20	0.30	30.20	31.60	29.90	33.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:45 AM	203.00	2.00	34.60	37.20	2.60	37.20	32.60	34.60	35.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:00 AM	197.00	1.60	34.90	43.20	8.30	43.20	33.10	34.90	36.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:15 AM	206.00	1.70	34.50	36.10	1.60	36.10	37.20	34.50	34.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:30 AM	198.00	1.70	34.00	35.90	1.90	35.90	36.70	34.00	32.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:45 AM	206.00	2.10	43.70	40.60	0.00	40.60	45.00	43.70	30.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:00 AM	210.00	1.60	38.50	45.80	7.30	45.80	38.80	38.50	39.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:15 AM	214.00	1.70	35.10	35.80	0.70	35.80	32.70	35.10	33.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:30 AM	207.00	1.80	30.70	31.80												



US Army Corps
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Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/20/13 2:15 PM	194.00	2.20	23.70	22.70	0.00	22.70	33.40	23.70	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 2:30 PM	224.00	4.90	23.80	23.80	0.00	23.80	41.50	23.80	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 2:45 PM	217.00	4.40	23.60	21.20	0.00	21.20	32.20	23.60	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:00 PM	241.00	5.60	24.50	22.80	0.00	22.80	25.50	24.50	25.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:15 PM	258.00	5.30	28.70	29.00	0.30	29.00	29.40	28.70	27.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:30 PM	206.00	3.30	76.80	24.20	0.00	24.20	168.40	76.80	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 3:45 PM	249.00	4.10	24.70	21.70	0.00	21.70	23.80	24.70	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:00 PM	237.00	3.50	22.30	30.90	8.60	30.90	21.30	22.30	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:15 PM	211.00	2.30	25.20	23.00	0.00	23.00	23.10	25.20	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:30 PM	186.00	3.90	26.20	24.10	0.00	24.10	45.70	26.20	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 4:45 PM	215.00	4.90	27.90	23.00	0.00	23.00	27.30	27.90	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:00 PM	205.00	5.20	22.70	22.40	0.00	22.40	24.40	22.70	22.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:15 PM	175.00	3.80	25.50	24.00	0.00	24.40	25.50	24.50	24.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:30 PM	196.00	6.40	23.80	24.00	0.20	24.00	25.90	23.80	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 5:45 PM	206.00	3.90	25.00	24.10	0.00	24.10	26.70	25.00	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:00 PM	244.00	4.90	22.90	22.50	0.00	22.50	26.30	22.90	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:15 PM	233.00	3.20	24.10	25.30	1.20	25.30	30.60	24.10	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:30 PM	219.00	3.00	23.80	23.40	0.00	23.40	28.60	23.80	23.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 6:45 PM	232.00	3.30	23.00	24.20	1.20	24.20	28.80	23.00	22.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 7:00 PM	213.00	4.80	22.30	26.20	3.90	26.20	35.90	22.30	21.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 7:15 PM	229.00	3.40	28.20	27.50	0.00	27.50	28.90	28.20	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 7:30 PM	222.00	3.80	24.40	24.50	0.10	24.50	29.70	24.40	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 7:45 PM	194.00	2.60	40.80	24.30	0.00	24.30	141.40	40.80	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 8:00 PM	196.00	2.20	27.20	22.70	0.00	22.70	32.80	27.20	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 8:15 PM	195.00	2.50	25.80	23.60	0.00	23.60	105.70	25.80	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 8:30 PM	196.00	2.60	29.70	24.70	0.00	24.70	31.30	29.70	28.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 8:45 PM	197.00	2.40	28.40	25.80	0.00	25.80	32.20	28.40	29.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 9:00 PM	201.00	1.70	28.10	25.00	0.00	25.00	32.20	28.10	33.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 9:15 PM	184.00	2.20	28.50	26.80	0.00	26.80	34.80	28.50	28.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 9:30 PM	201.00	2.10	35.40	27.70	0.00	27.70	37.00	35.40	33.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 9:45 PM	204.00	2.10	26.30	26.90	0.60	26.90	38.10	26.30	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 10:00 PM	198.00	2.50	25.50	27.60	2.10	27.60	30.00	25.50	25.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 10:15 PM	193.00	2.80	26.40	26.10	0.00	26.10	32.10	26.40	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 10:30 PM	191.00	1.70	27.10	27.50	0.40	27.50	32.20	27.10	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 10:45 PM	198.00	2.30	29.10	33.40	4.30	33.40	34.70	29.10	24.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 11:00 PM	190.00	2.00	29.60	30.50	0.90	30.50	35.40	29.60	25.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 11:15 PM	234.00	1.00	30.70	30.80	0.10	30.80	35.90	30.70	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 11:30 PM	0.00	0.00	0.00	0.00	0.00	35.50	36.40	32.00	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/20/13 11:45 PM	223.00	2.70	33.20	32.00	0.00	32.00	36.50	33.20	27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 12:00 AM	220.00	2.60	34.80	32.90	0.00	32.90	39.10	34.80	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 12:15 AM	209.00	2.70	32.40	33.60	1.20	33.60	37.90	32.40	26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 12:30 AM	196.00	1.90	33.10	31.70	0.00	31.70	35.60	33.10	26.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 12:45 AM	207.00	2.90	33.50	32.80	0.00	32.80	36.20	33.50	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 1:00 AM	219.00	1.60	33.10	34.40	1.30	34.40	36.70	33.10	27.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 1:15 AM	205.00	2.20	33.20	33.10	0.00	33.10	36.50	33.20	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 1:30 AM	222.00	2.70	33.40	32.30	0.00	32.30	39.70	33.40	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 1:45 AM	209.00	1.40	32.70	34.50	1.80	34.50	36.00	32.70	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 2:00 AM	202.00	2.20	33.10	33.20	0.10	33.20	36.20	33.10	29.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 2:15 AM	192.00	2.30	32.90	33.60	0.70	33.60	36.70	32.90	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 2:30 AM	199.00	2.20	32.70	34.30	1.60	34.30	36.20	32.70	29.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 2:45 AM	185.00	2.50	32.90	34.00	1.10	34.00	36.90	32.90	29.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 3:00 AM	202.00	2.00	34.50	34.70	0.20	34.70	37.50	34.50	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 3:15 AM	219.00	2.20	34.60	34.20	0.00	34.20	37.00	34.60	33.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 3:30 AM	204.00	1.90	34.30	34.70	0.40	34.70	39.50	34.30	32.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 3:45 AM	203.00	1.90	38.00	36.20	0.00	36.20	39.60	38.00	34.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 4:00 AM	210.00	2.50	35.60	34.40	0.00	34.40	37.10	35.60	32.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 4:15 AM	206.00	2.60	34.80	37.10	2.30	37.10	38.30	34.80	30.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 4:30 AM	215.00	2.90	32.90	34.30	1.40	34.30	36.20	32.90	28.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 4:45 AM	216.00	2.10	33.00	34.50	1.50	34.50	34.70	33.00	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 5:00 AM	205.00	2.00	32.30	33.50	1.20	33.50	35.70	32.30	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 5:15 AM	216.00	2.30	31.10	31.90	0.80	31.90	36.20	31.10	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 5:30 AM	231.00	1.70	30.80	31.50	0.70	31.50	35.90	30.80	28.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 5:45 AM	229.00	1.70	31.30	32.20	0.90	32.20	36.10	31.30	27.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 6:00 AM	203.00	2.00	31.50	32.50	1.00	32.50	36.30	31.50	28.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 6:15 AM	204.00	1.90	31.50	32.40	0.90	32.40	36.90	31.50	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 6:30 AM	205.00	2.10	31.70	33.00	1.30	33.00	36.90	31.70	30.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 6:45 AM	223.00	2.00	32.40	33.40	1.00	33.40	37.40	32.40	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 7:00 AM	199.00	1.60	33.80	33.50	0.00	33.50	36.00	33.80	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/21/13 7:15 AM	201.00	1.90	33.20	34.10	0.90											



**US Army Corps
of Engineers**

**Indiana Harbor and Canal
Confined Disposal Facility**
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/25/13 6:00 PM	228.00	3.80	18.60	20.90	2.30	20.90	18.60	18.60	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 6:15 PM	237.00	3.60	18.60	20.50	1.90	20.50	34.60	18.60	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 6:30 PM	233.00	5.00	18.20	0.00	0.00	0.00	18.40	18.20	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 6:45 PM	209.00	5.00	18.30	19.50	1.20	19.50	17.10	18.30	17.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 7:00 PM	219.00	4.00	17.20	18.80	1.60	18.80	17.30	17.20	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 7:15 PM	229.00	2.40	16.50	32.80	16.30	32.80	16.30	16.50	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 7:30 PM	227.00	3.90	15.50	19.90	4.40	19.90	17.00	15.50	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 7:45 PM	219.00	2.30	15.10	20.70	5.60	20.70	16.10	15.10	15.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 8:00 PM	208.00	3.30	13.60	20.20	6.60	20.20	15.80	13.60	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 8:15 PM	230.00	2.60	14.60	20.10	5.50	20.10	15.70	14.60	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 8:30 PM	233.00	1.90	16.00	20.00	4.00	20.00	16.00	16.00	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 8:45 PM	219.00	2.70	16.20	21.10	4.90	21.10	85.60	16.20	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 9:00 PM	216.00	2.10	17.50	21.70	4.20	21.70	17.40	17.50	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 9:15 PM	226.00	2.90	16.80	21.60	4.80	21.60	17.80	16.80	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 9:30 PM	231.00	2.50	16.00	21.80	5.80	21.80	18.00	16.00	17.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 9:45 PM	213.00	2.90	15.90	21.90	6.00	21.90	18.60	15.90	16.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 10:00 PM	219.00	2.70	16.00	21.70	5.70	21.70	18.50	16.00	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 10:15 PM	214.00	2.80	16.00	21.80	5.80	21.80	18.90	16.00	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 10:30 PM	228.00	2.80	16.20	21.80	5.60	21.80	18.50	16.20	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 10:45 PM	211.00	2.90	17.00	22.20	5.20	22.20	19.20	17.00	14.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 11:00 PM	216.00	2.60	17.00	22.30	5.30	22.30	20.50	17.00	13.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 11:15 PM	197.00	2.60	17.40	23.00	5.60	23.00	19.40	17.40	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 11:30 PM	218.00	3.30	18.00	22.80	4.80	22.80	19.90	18.00	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/25/13 11:45 PM	210.00	2.80	16.80	22.40	5.60	22.40	19.40	16.80	14.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 12:00 AM	203.00	3.30	17.00	21.60	4.60	21.60	19.40	17.00	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 12:15 AM	206.00	3.50	17.30	21.70	4.40	21.70	18.90	17.30	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 12:30 AM	207.00	3.00	17.50	21.70	4.20	21.70	19.00	17.50	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 12:45 AM	198.00	3.90	17.80	21.60	3.80	21.60	20.40	17.80	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 1:00 AM	212.00	3.00	17.10	20.90	3.80	20.90	21.20	17.10	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 1:15 AM	211.00	2.20	17.30	21.40	4.10	21.40	22.30	17.30	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 1:30 AM	217.00	3.20	17.40	20.60	3.20	20.60	21.30	17.40	15.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 1:45 AM	212.00	3.20	16.80	21.20	4.40	21.20	20.60	16.80	16.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 2:00 AM	224.00	3.50	16.70	20.90	4.20	20.90	20.40	16.70	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 2:15 AM	207.00	4.40	16.60	20.60	4.00	20.60	20.20	16.60	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 2:30 AM	230.00	3.40	17.10	20.60	3.50	20.60	19.60	17.10	16.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 2:45 AM	221.00	3.70	16.30	21.10	4.80	21.10	19.50	16.30	17.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 3:00 AM	203.00	3.40	16.70	20.60	3.90	20.60	18.60	16.70	17.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 3:15 AM	232.00	1.70	17.30	19.90	2.60	19.90	18.10	17.30	16.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 3:30 AM	205.00	3.90	16.30	20.10	3.80	20.10	17.90	16.30	16.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 3:45 AM	215.00	2.70	16.00	18.90	2.90	18.90	17.00	16.00	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 4:00 AM	216.00	2.70	16.00	18.80	2.80	18.80	16.90	16.00	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 4:15 AM	229.00	4.30	16.10	19.00	2.90	19.00	17.00	16.10	17.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 4:30 AM	203.00	2.40	16.10	18.90	2.80	18.90	17.00	16.10	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 4:45 AM	224.00	3.40	16.10	18.90	2.80	18.90	17.00	16.10	29.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 5:00 AM	218.00	2.90	16.10	19.10	3.00	19.10	17.30	16.10	37.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 5:15 AM	214.00	2.40	16.10	18.50	2.40	18.50	16.70	16.10	40.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 5:30 AM	205.00	2.60	16.10	18.70	2.60	18.70	16.80	16.10	41.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 5:45 AM	209.00	2.80	16.10	18.30	2.20	18.30	16.50	16.10	38.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 6:00 AM	187.00	2.80	16.40	18.60	2.20	18.60	16.60	16.40	38.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 6:15 AM	202.00	2.70	16.20	18.50	2.30	18.50	16.90	16.20	35.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 6:30 AM	201.00	3.10	16.60	19.40	2.80	19.40	18.30	16.60	36.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 6:45 AM	200.00	2.20	17.20	19.60	2.40	19.60	17.70	17.20	38.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 7:00 AM	206.00	2.40	17.20	19.10	1.90	19.10	18.60	17.20	38.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 7:15 AM	219.00	3.00	17.90	19.40	1.50	19.40	20.70	17.90	38.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 7:30 AM	207.00	2.70	17.30	19.20	1.90	19.20	18.80	17.30	38.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 7:45 AM	233.00	2.50	18.10	20.40	2.30	20.40	63.00	18.10	40.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 8:00 AM	152.00	1.60	18.40	36.70	18.30	20.00	18.40	17.50	36.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 8:15 AM	247.00	3.50	18.20	20.00	1.80	20.00	18.20	18.20	38.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 8:30 AM	238.00	3.30	19.10	21.30	2.20	21.30	19.30	19.10	38.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 8:45 AM	264.00	3.20	21.20	23.90	2.70	23.90	24.70	21.20	40.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 9:00 AM	263.00	3.70	23.40	27.50	4.10	27.50	24.50	23.40	43.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 9:15 AM	277.00	3.60	52.40	28.60	0.00	29.30	28.60	24.50	52.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 9:30 AM	255.00	3.00	25.30	29.10	3.80	29.10	29.00	25.30	56.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 9:45 AM	272.00	3.20	71.20	31.00	0.00	28.90	31.00	23.60	71.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 10:00 AM	265.00	1.20	23.60	28.60	5.00	28.60	26.50	23.60	54.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 10:15 AM	303.00	3.80	44.60	32.10	0.00	29.70	32.10	23.70	44.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 10:30 AM	246.00	3.20	25.40	32.60	7.20	32.60	29.00	25.40	41.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 10:45 AM	266.00	4.50	26.00	30.80	4.80	30.80	28.80	26.00	44.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/13 11:00 AM	270.00	3.70	47.50													



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4		
8/27/13 7:30 PM	217.00	4.80	23.20	23.90	0.70	23.90	23.30	23.20	21.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 7:45 PM	211.00	5.80	22.50	28.80	6.30	28.80	23.30	22.50	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 8:00 PM	224.00	4.90	22.00	22.60	0.60	22.60	23.00	22.00	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 8:15 PM	243.00	6.50	23.00	24.70	1.70	24.70	24.50	23.00	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 8:30 PM	240.00	7.90	22.80	23.80	1.00	23.80	24.10	22.80	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 8:45 PM	227.00	4.40	23.10	23.80	0.70	23.80	24.00	23.10	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 9:00 PM	223.00	3.80	22.70	23.80	1.10	23.80	24.00	22.70	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 9:15 PM	231.00	6.50	22.50	23.90	1.40	23.90	24.30	22.50	19.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 9:30 PM	245.00	4.60	22.60	24.00	1.40	24.00	25.20	22.60	19.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 9:45 PM	225.00	5.00	23.20	24.90	1.70	24.90	24.70	23.20	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 10:00 PM	239.00	4.60	22.90	24.10	1.20	24.10	23.70	22.90	20.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 10:15 PM	238.00	9.60	23.00	24.20	1.20	24.20	24.70	23.00	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 10:30 PM	239.00	8.00	22.60	23.70	1.10	23.70	24.50	22.60	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 10:45 PM	219.00	3.50	22.10	23.70	1.60	23.70	24.30	22.10	20.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 11:00 PM	249.00	5.20	22.10	23.70	1.60	23.70	24.20	22.10	20.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 11:15 PM	243.00	7.00	22.40	23.30	0.90	23.30	23.20	22.40	20.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 11:30 PM	232.00	8.40	21.90	22.70	0.80	22.70	23.70	21.90	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/27/13 11:45 PM	229.00	4.20	21.80	22.60	0.80	22.60	23.90	21.80	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 12:00 AM	239.00	6.30	21.70	22.60	0.90	22.60	23.30	21.70	18.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 12:15 AM	256.00	7.60	21.40	22.40	1.00	22.40	22.70	21.40	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 12:30 AM	246.00	4.60	21.50	22.00	0.50	22.00	23.00	21.50	18.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 12:45 AM	262.00	8.20	21.00	22.40	1.40	22.40	22.30	21.00	18.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 1:00 AM	260.00	4.90	20.70	21.10	0.40	21.10	22.10	20.70	19.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 1:15 AM	258.00	5.80	20.20	20.90	0.70	20.90	21.40	20.20	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 1:30 AM	252.00	2.80	19.60	20.50	0.90	20.50	21.60	19.60	18.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 1:45 AM	256.00	5.00	19.50	20.20	0.70	20.20	21.70	19.50	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 2:00 AM	251.00	5.90	19.50	19.70	0.20	19.70	21.10	19.50	18.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 2:15 AM	275.00	5.50	19.70	20.50	0.80	20.50	20.50	19.10	19.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 2:30 AM	286.00	5.30	21.10	20.40	0.00	20.50	20.40	18.70	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 2:45 AM	273.00	5.80	21.10	19.40	0.00	19.90	19.40	18.10	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 3:00 AM	282.00	4.80	22.00	20.30	0.00	20.30	20.30	18.30	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 3:15 AM	277.00	6.40	22.10	20.20	0.00	20.40	20.20	18.30	22.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 3:30 AM	269.00	4.40	18.20	20.10	1.90	20.10	20.50	18.20	21.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 3:45 AM	258.00	3.60	18.70	20.40	1.70	20.40	20.70	18.70	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 4:00 AM	282.00	3.10	19.90	21.70	1.80	20.20	21.70	18.70	19.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 4:15 AM	271.00	2.90	20.00	20.30	0.30	21.60	20.30	18.90	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 4:30 AM	275.00	2.50	19.10	20.90	1.80	21.10	20.90	18.90	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 4:45 AM	308.00	2.50	17.80	21.50	3.70	21.30	21.50	19.00	17.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 5:00 AM	267.00	1.90	18.90	21.30	2.40	21.30	21.40	18.90	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 5:15 AM	271.00	2.30	17.90	21.70	3.80	21.40	21.70	19.40	17.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 5:30 AM	273.00	2.70	18.00	21.60	3.60	22.40	21.60	19.50	18.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 5:45 AM	272.00	1.70	21.50	22.20	0.70	23.00	22.20	19.90	21.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 6:00 AM	3.00	4.60	24.90	20.30	0.00	24.90	24.30	20.30	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 6:15 AM	339.00	1.80	24.30	23.70	0.00	25.70	23.70	20.70	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 6:30 AM	3.00	4.30	24.70	21.10	0.00	24.70	23.30	21.10	23.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 6:45 AM	0.00	4.30	24.70	21.20	0.00	24.70	24.60	21.20	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 7:00 AM	3.00	5.70	29.50	25.90	0.00	29.50	26.60	25.90	26.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 7:15 AM	3.00	4.80	31.80	27.50	0.00	31.80	31.00	27.50	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 7:30 AM	5.00	5.80	30.20	27.00	0.00	30.20	31.90	27.00	26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 7:45 AM	4.00	4.20	30.40	24.60	0.00	30.40	26.80	24.60	26.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 8:00 AM	12.00	5.40	28.80	25.50	0.00	28.80	26.90	25.50	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 8:15 AM	3.00	5.20	28.10	24.70	0.00	28.10	26.10	24.70	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 8:30 AM	7.00	5.40	29.40	24.50	0.00	29.40	27.30	24.50	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 8:45 AM	4.00	9.20	28.30	24.60	0.00	28.30	28.10	24.60	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 9:00 AM	16.00	7.40	25.30	21.20	0.00	25.30	24.40	21.20	20.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 9:15 AM	11.00	7.60	17.80	19.10	1.30	17.80	18.40	19.10	11.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 9:30 AM	17.00	9.00	13.00	14.10	1.10	13.00	8.60	14.10	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 9:45 AM	18.00	8.80	19.70	14.70	0.00	19.70	15.50	14.70	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 10:00 AM	15.00	6.50	21.70	16.50	0.00	21.70	19.50	16.50	12.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 10:15 AM	1.00	4.60	17.90	17.60	0.00	17.90	15.40	17.60	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 10:30 AM	7.00	5.50	16.50	15.90	0.00	16.50	13.20	15.90	10.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 10:45 AM	3.00	7.20	15.10	15.30	0.20	15.10	12.50	15.30	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 11:00 AM	11.00	7.20	15.10	13.10	0.00	15.10	11.70	13.10	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 11:15 AM	0.00	6.70	14.80	13.00	0.00	14.80	11.50	13.00	8.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 11:30 AM	1.00	6.60	14.60	12.40	0.00	14.60	10.30	12.40	43.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8/28/13 11:45 AM	359.00	6.6																



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)						Naphthalene (µg/m ³)							
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/29/13 9:00 PM	136.00	2.60	29.50	23.20	0.00	28.20	29.50	25.60	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 9:15 PM	100.00	1.70	45.10	31.50	0.00	46.20	45.10	26.70	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 9:30 PM	123.00	1.80	31.50	21.20	0.00	24.00	31.50	28.00	21.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 9:45 PM	179.00	0.70	21.30	14.80	0.00	19.60	21.30	20.20	14.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 10:00 PM	164.00	1.30	18.00	12.60	0.00	18.70	18.00	18.80	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 10:15 PM	203.00	0.70	20.90	0.00	0.00	0.00	50.30	20.90	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 10:30 PM	250.00	0.70	30.90	0.00	0.00	0.00	68.60	30.90	14.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 10:45 PM	242.00	0.80	20.50	19.70	0.00	19.70	19.60	20.50	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 11:00 PM	305.00	0.60	19.10	22.30	3.20	28.40	22.30	20.40	19.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 11:15 PM	328.00	1.00	41.90	24.50	0.00	57.70	24.50	21.30	41.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 11:30 PM	271.00	0.70	21.10	23.20	2.10	33.20	23.20	21.00	21.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/29/13 11:45 PM	247.00	0.90	22.00	33.30	11.30	33.30	24.10	22.00	27.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:00 AM	264.00	1.00	25.00	32.90	7.90	32.90	30.40	25.00	23.10	0.00	2.30	2.30	0.00	2.30	0.00	0.00
8/30/13 12:15 AM	272.00	0.40	25.90	34.20	8.30	35.60	34.20	26.70	25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:30 AM	279.00	0.70	27.40	35.20	7.80	35.90	35.20	28.70	27.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:45 AM	270.00	0.90	26.10	35.70	9.60	34.90	35.70	27.10	26.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:00 AM	323.00	0.60	26.00	38.40	12.40	36.00	38.40	26.40	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:15 AM	220.00	0.50	25.90	38.10	12.20	38.10	36.50	25.90	29.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:30 AM	274.00	0.90	30.20	33.20	3.00	39.20	33.20	29.20	30.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:45 AM	238.00	0.60	27.10	38.20	11.10	38.20	34.70	27.10	28.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 2:00 AM	273.00	0.10	32.40	33.40	1.00	36.50	33.40	27.50	32.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 2:15 AM	334.00	0.10	28.20	31.40	3.20	37.70	31.40	26.90	28.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 2:30 AM	235.00	0.70	26.60	38.20	11.60	38.20	34.70	26.60	30.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 2:45 AM	217.00	1.10	26.20	39.80	13.60	39.80	30.10	26.20	31.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 3:00 AM	243.00	1.10	25.50	39.10	13.60	39.10	36.20	25.50	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 3:15 AM	215.00	1.00	26.00	34.60	8.60	34.60	35.90	26.00	30.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 3:30 AM	213.00	1.80	28.90	35.30	6.40	35.30	36.60	28.90	31.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 3:45 AM	221.00	1.70	27.40	35.80	8.40	35.80	34.80	27.40	28.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 4:00 AM	206.00	1.60	29.10	0.00	0.00	0.00	33.80	29.10	27.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 4:15 AM	228.00	1.60	29.40	33.70	4.30	33.70	32.50	29.40	28.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 4:30 AM	216.00	1.70	28.90	0.00	0.00	0.00	32.50	28.90	29.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 4:45 AM	206.00	1.70	28.20	32.50	4.30	32.50	32.30	28.20	26.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 5:00 AM	202.00	1.90	26.80	30.60	3.80	30.60	31.00	26.80	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 5:15 AM	207.00	1.80	26.60	30.40	3.80	30.40	28.90	26.60	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 5:30 AM	216.00	2.00	26.30	30.80	4.50	30.80	29.00	26.30	23.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 5:45 AM	202.00	1.90	25.90	30.00	4.10	30.00	29.90	25.90	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 6:00 AM	199.00	2.10	25.60	29.20	3.60	29.20	29.50	25.60	24.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 6:15 AM	191.00	2.50	0.00	30.50	0.00	30.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 6:30 AM	212.00	2.40	25.50	30.00	4.50	30.00	29.70	25.50	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 6:45 AM	193.00	2.20	25.40	29.20	3.80	29.20	27.90	25.40	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 7:00 AM	224.00	1.50	25.20	29.00	3.80	29.00	28.40	25.20	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 7:15 AM	216.00	2.40	25.20	28.80	3.60	28.80	28.60	25.20	24.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 7:30 AM	214.00	2.90	25.70	29.10	3.40	29.10	29.40	25.70	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 7:45 AM	203.00	2.80	25.20	29.20	4.00	29.20	30.00	25.20	25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 8:00 AM	216.00	3.60	26.40	29.70	3.30	29.70	30.60	26.40	24.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 8:15 AM	202.00	2.90	25.60	29.00	3.40	29.00	29.50	25.60	25.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 8:30 AM	197.00	3.30	25.10	29.70	4.60	29.70	28.80	25.10	25.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 8:45 AM	203.00	3.60	25.20	28.80	3.60	28.80	29.60	25.20	25.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 9:00 AM	234.00	2.60	25.20	28.50	3.30	28.50	42.70	25.20	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 9:15 AM	226.00	3.90	24.50	28.10	3.60	28.10	27.60	24.50	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 9:30 AM	214.00	5.00	23.40	27.80	4.40	27.80	27.10	23.40	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 9:45 AM	238.00	4.10	22.90	27.60	4.70	27.60	25.20	22.90	24.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:00 AM	232.00	4.70	22.60	26.80	4.20	26.80	26.40	22.60	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:15 AM	232.00	4.70	22.50	26.10	3.60	26.10	26.60	22.50	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:30 AM	220.00	3.20	23.00	26.40	3.40	26.40	24.90	23.00	23.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:45 AM	241.00	4.90	23.30	27.30	4.00	27.30	28.90	23.30	27.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:00 AM	215.00	5.40	23.20	26.40	3.20	26.40	29.90	23.20	24.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:15 AM	231.00	3.60	21.40	26.30	4.90	26.30	30.60	21.40	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:30 AM	248.00	4.60	21.10	23.90	2.80	23.90	27.70	21.10	20.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:45 AM	264.00	5.50	21.40	24.00	2.60	24.00	27.60	21.40	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:00 PM	215.00	5.20	22.10	25.20	3.10	25.20	29.00	22.10	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:15 PM	204.00	5.30	21.20	24.80	3.60	24.80	29.50	21.20	21.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:30 PM	258.00	5.10	22.60	24.80	2.20	24.80	27.70	22.60	22.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 12:45 PM	202.00	3.80	21.30	24.50	3.20	24.50	28.10	21.30	23.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:00 PM	231.00	4.80	21.80	24.90	3.10	24.90	27.80	21.80	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:15 PM	268.00	4.90	21.10	24.50	3.40	24.50	26.00	21.10	22.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:30 PM	222.00	5.00	21.60	24.70	3.10	24.70	38.60	21.60	22.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 1:45 PM	230.00	6.50	22.20	25.60	3.40	25.60	48.30	22.20	22.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 2:00 PM	208.00	5.50	21.70	24.00												



US Army Corps of Engineers

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degrees Clockwise from North	Wind Speed mph	Particulates (µg/m ³)								Naphthalene (µg/m ³)					
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/30/13 9:45 PM	7.00	2.50	23.00	22.80	0.00	23.00	20.00	22.80	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:00 PM	328.00	2.20	13.40	18.60	5.20	21.70	18.60	21.50	13.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:15 PM	307.00	2.70	9.10	16.20	7.10	18.50	16.20	20.00	9.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:30 PM	274.00	1.80	8.40	14.30	5.90	17.90	14.30	18.10	8.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 10:45 PM	339.00	3.30	10.00	16.20	6.20	18.00	16.20	19.70	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:00 PM	322.00	3.20	9.40	16.00	6.60	18.70	16.00	20.20	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:15 PM	339.00	2.30	13.20	17.80	4.60	19.60	17.80	19.10	13.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:30 PM	347.00	3.30	10.80	16.60	5.80	18.80	16.60	19.10	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/30/13 11:45 PM	336.00	3.50	12.50	17.80	5.30	20.20	17.80	19.30	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:00 AM	357.00	5.30	11.30	17.80	6.50	18.30	17.80	18.80	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:15 AM	7.00	5.20	18.50	17.80	0.00	18.50	14.70	17.80	11.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:30 AM	30.00	7.20	18.70	18.50	0.00	18.70	17.50	18.50	11.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:45 AM	21.00	7.20	20.20	19.40	0.00	20.20	18.70	19.40	13.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:00 AM	42.00	7.90	16.10	17.80	1.70	16.10	14.00	17.80	7.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:15 AM	44.00	7.60	15.50	14.80	0.00	15.50	8.40	14.80	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:30 AM	37.00	8.50	17.40	14.00	0.00	17.40	13.90	14.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:45 AM	47.00	8.90	18.50	14.20	0.00	18.50	8.40	14.20	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:00 AM	34.00	8.50	15.50	15.20	0.00	15.50	8.30	15.20	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:15 AM	38.00	7.80	13.80	16.00	2.20	13.80	8.20	16.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:30 AM	37.00	6.50	13.80	15.30	1.50	13.80	8.20	15.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:45 AM	28.00	7.90	12.50	14.40	1.90	12.50	7.00	14.40	3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 3:00 AM	44.00	5.70	12.60	13.20	0.60	12.60	6.40	13.20	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 3:15 AM	44.00	8.50	11.40	14.40	3.00	11.40	6.00	14.40	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 3:30 AM	42.00	5.90	11.20	12.80	1.60	11.20	5.70	12.80	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 3:45 AM	44.00	3.10	10.90	12.70	1.80	10.90	5.90	12.70	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 4:00 AM	31.00	5.60	10.60	12.50	1.90	10.60	5.90	12.50	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 4:15 AM	19.00	5.80	10.40	11.40	1.00	10.40	5.30	11.40	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 4:30 AM	50.00	3.00	10.50	11.70	1.20	10.50	6.30	11.70	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 4:45 AM	29.00	3.80	10.60	10.50	0.00	10.60	6.40	10.50	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 5:00 AM	48.00	5.40	10.70	10.70	0.00	10.70	7.30	10.70	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 5:15 AM	38.00	4.20	10.00	10.90	0.90	10.00	8.30	10.90	3.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 5:30 AM	63.00	3.50	9.90	11.30	1.40	9.90	8.30	11.30	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 5:45 AM	59.00	2.00	11.40	10.90	0.00	11.40	7.70	10.90	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 6:00 AM	61.00	3.20	10.60	11.10	0.50	10.60	9.90	11.10	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 6:15 AM	57.00	2.70	11.40	11.50	0.10	11.40	9.70	11.50	9.80	1.30	0.00	0.00	0.00	1.30	0.00	0.00
8/31/13 6:30 AM	44.00	3.20	11.00	11.10	0.10	11.00	9.40	11.10	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 6:45 AM	53.00	3.70	10.40	11.60	1.20	10.40	6.40	11.60	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 7:00 AM	39.00	3.20	9.80	10.40	0.60	9.80	8.10	10.40	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 7:15 AM	50.00	1.40	9.30	9.80	0.50	9.30	6.60	9.80	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 7:30 AM	185.00	1.40	9.50	8.90	0.00	9.50	5.80	9.50	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 7:45 AM	245.00	1.00	9.40	9.00	0.00	9.40	5.10	9.40	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 8:00 AM	331.00	0.20	6.60	14.20	7.60	8.30	14.20	8.70	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 8:15 AM	6.00	1.80	16.00	9.90	0.00	16.00	16.30	9.90	15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 8:30 AM	47.00	1.40	12.00	10.70	0.00	12.00	8.50	10.70	15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 8:45 AM	138.00	1.70	8.90	5.70	0.00	11.50	8.90	9.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 9:00 AM	48.00	2.90	10.10	9.60	0.00	10.10	7.90	9.60	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 9:15 AM	91.00	3.00	8.80	3.80	0.00	10.10	8.80	8.60	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 9:30 AM	67.00	2.20	8.40	8.80	0.40	8.40	9.60	8.80	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 9:45 AM	48.00	4.30	21.90	9.20	0.00	21.90	12.20	9.20	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 10:00 AM	17.00	4.70	19.00	18.00	0.00	19.00	30.00	18.00	39.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 10:15 AM	351.00	3.50	6.90	9.10	2.20	9.20	9.10	10.80	6.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 10:30 AM	17.00	4.20	9.80	10.50	0.70	9.80	10.40	10.50	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 10:45 AM	114.00	4.70	8.90	4.50	0.00	12.50	8.90	14.40	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:00 AM	73.00	4.30	9.10	9.60	0.50	9.10	7.50	9.60	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:15 AM	80.00	2.40	10.40	12.30	1.90	10.40	5.90	12.30	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:30 AM	86.00	4.40	11.30	8.70	0.00	11.30	7.10	8.70	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:45 AM	84.00	1.50	11.40	11.80	0.40	11.40	9.00	11.80	23.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:00 PM	10.00	3.00	11.80	11.20	0.00	11.80	15.70	11.20	16.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:15 PM	57.00	1.60	19.40	18.50	0.00	19.40	34.60	18.50	15.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:30 PM	105.00	1.80	18.10	46.90	28.80	29.40	18.10	11.70	46.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 12:45 PM	75.00	5.60	31.60	14.20	0.00	31.60	18.50	14.20	56.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:00 PM	105.00	4.70	22.10	14.50	0.00	32.50	22.10	17.80	14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:15 PM	18.00	2.60	10.00	9.30	0.00	10.00	8.60	9.30	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:30 PM	122.00	2.10	15.30	15.70	0.40	12.00	15.30	13.40	15.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 1:45 PM	107.00	2.40	17.20	24.60	7.40	13.70	17.20	11.70	24.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:00 PM	72.00	2.30	15.80	9.90	0.00	15.80	19.20	9.90	7.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:15 PM	75.00	5.60	12.90	10.60	0.00	12.90	13.40	10.60	12.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:30 PM	52.00	4.80	14.50	11.40	0.00	14.50	17.10	11.40	13.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 2:45 PM	43.00	2.50	21.70	13.00	0.00	21.70	20.10	13.00	35.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 3:00 PM	29.00	4.70	21.40	15.00	0.00											



**US Army Corps
of Engineers**

Indiana Harbor and Canal
Confined Disposal Facility
Real-Time Air Monitoring Data
8-1-13 to 8-31-13

Reading Time (EST)	Wind Direction Degree Clockwise from North	Wind Speed mph	Particulates (µg/m ³)							Naphthalene (µg/m ³)						
			Upwind	Downwind	CDF Contribution	M1	M2	M3	M4	Upwind	Downwind	CDF Contribution	M1	M2	M3	M4
8/31/13 10:30 PM	30.00	5.40	14.00	12.00	0.00	14.00	28.10	12.00	8.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 10:45 PM	49.00	4.60	9.40	9.70	0.30	9.40	10.50	9.70	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:00 PM	34.00	5.00	11.20	9.70	0.00	11.20	8.60	9.70	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:15 PM	23.00	5.50	9.50	9.10	0.00	9.50	7.70	9.10	5.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:30 PM	46.00	4.80	9.60	9.60	0.00	9.60	7.30	9.60	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/31/13 11:45 PM	36.00	6.00	8.70	8.70	0.00	8.70	6.60	8.70	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

Cerex Unit (Naphthalene) Thermo Unit (Particles) PID Monitor

Date & Time of alarm: 8/16/2013 2:00PM Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

1. Was dredging occurring at the time of the alarm? (Yes or No)

2. Alarm caused by:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: Weather |

3. Corrective Actions taken? (Yes or No)

4. Dredging suspended? (Yes or No)

5. Alarm logged in air monitoring action spreadsheet? (Yes or No)

Description of Action Taken:

A) No problems were found. Driving to fast causing dust and dry site condicions is believe to have caused the alarms.

IHC CDF Dredge Project : Air Monitoring Alarm Response Log

Air Monitoring Station: M1 M2 M3 M4 Dock

Air Monitoring Instrument:

Cerex Unit (Naphthalene) Thermo Unit (Particles) PID Monitor

Date & Time of alarm: 8/12/2013 11:30AM Email sent to site Technician? (Yes or No)

Technician responded to the alarm; Scott Peterson

1. Was dredging occurring at the time of the alarm? (Yes or No)

2. Alarm caused by:

- | | |
|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Loss of Power |
| <input type="checkbox"/> | Loss of Radio Communication |
| <input type="checkbox"/> | Out of Calibration |
| <input type="checkbox"/> | UV Alignment |
| <input type="checkbox"/> | Blockage in Air Tube |
| <input checked="" type="checkbox"/> | Air Quality |
| <input checked="" type="checkbox"/> | Other: Weather |

3. Corrective Actions taken? (Yes or No)

4. Dredging suspended? (Yes or No)

5. Alarm logged in air monitoring action spreadsheet? (Yes or No)

Description of Action Taken:

A) No problems were found. Site maintenance and lawn mow is believed to cause the alarms.

